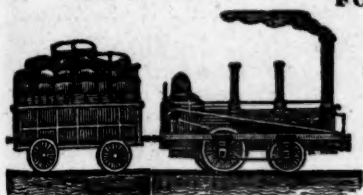
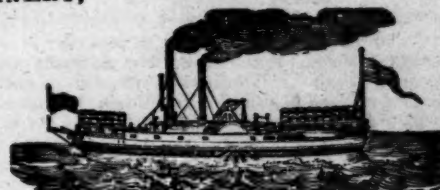


AMERICAN RAILROAD JOURNAL, AND GENERAL ADVERTISER

FOR RAILROADS, CANALS, STEAMBOATS, MACHINERY,
AND MINES.



ESTABLISHED 1831.



PUBLISHED WEEKLY, AT No. 23 CHAMBERS STREET, NEW YORK, AT FIVE DOLLARS PER ANNUM.

SECOND QUARTO SERIES, VOL. II., No. 39.]

SATURDAY, SEPTEMBER 26, 1846.

[WHOLE No. 536, VOL. XIX.

BOSTON AND PROVIDENCE RAILROAD. Passenger Notice. Summer Arrangement. On and after Monday, April 6, 1846, the Passenger Trains will run as follows:

For New York—Night Line, via Stonington. Leaves Boston every day, but Sunday, at 5 p.m. Accommodation Trains, leave Boston at 7½ a.m. and 4 p.m., and Providence at 8 a.m. and 4½ p.m. Dedham trains, leave Boston at 8 a.m. 12½ m., 3½ p.m., and 6½ p.m. Leave Dedham at 7 a.m. and 9½ a.m. and 2½ and 5½ p.m. Stoughton trains, leave Boston at 11½ a.m. and 5½ p.m. Leave Stoughton at 7-20 a.m. and 3½ p.m. All baggage at the risk of the owners thereof.
31 ly W. RAYMOND LEE, *Sup't.*

BRANCH RAILROAD AND STAGES CONNECTING with the Boston and Providence Railroad. Stages connect with the Accommodation trains at the Foxboro' Station, to and from Woonsocket. At the Seekonk Station, to and from Lonsdale, R. I. via Pawtucket. At the Sharon Station, to and from Walpole, Mass. And at Dedham Village Station, to and from Medford, via Medway, Mass. At Providence, to and from Bristol, via Warren, R. I.—Taunton, New Bedford and Fall River cars run in connection with the accommodation trains.

NORWICH AND WORCESTER RAILROAD. Summer Arrangement, commencing Monday, April 6, 1846.

Accommodation Trains, daily, except Sunday. Leave Norwich, at 6 a.m., and 4 p.m. Leave Worcester, at 10 a.m., and 4½ p.m. The morning Accommodation Trains from Norwich, and from Worcester, connect with the trains of the Boston, and Worcester and Western railroads each way.

The Evening Accommodation Train from Worcester connects with the 1½ p.m. train from Boston. New York Train via Long Island Railroad: Leave Allyn's Point for Boston, about 1 p.m., daily, except Sunday.

Leave Worcester for New York, about 10 a.m., stopping at Webster, Danielsonville, and Norwich. New York Train via Steamboat—Leave Norwich for Boston, every morning, except Monday, on the arrival of the steamboat from New York, stopping at Norwich and Danielsonville.

Leave Worcester for New York, upon the arrival of the train from Boston, at about 4½ p.m., daily, except Sunday, stopping at Webster, Danielsonville and Norwich.

Freight Trains daily each way, except Sunday. Special contracts will be made for cargoes, or large quantities of freight, on application to the superintendent.

Fares are Less when paid for Tickets than when paid in the Cars. 321y

J. W. STOWELL, *Sup't.*

BOSTON AND MAINE RAILROAD. Upper Route, Boston to Portland via, Reading, Andover, Haverhill, Exeter, Dover, Great Falls, South & North Berwick, Wells, Kennebunk and Saco.

Summer Arrangement, 1846. On and after April 13, 1846, Passenger Trains will leave daily, (Sundays excepted,) as follows: Boston for Portland at 7½ a.m. and 2½ p.m. Boston for Great Falls at 7½ a.m., 2½ and 4½ p.m. Boston for Haverhill at 7½ and 11½ a.m., 2½, 4½ and 6 p.m. Boston for Reading at 7½, 9, and 11½ a.m., 2½, 4½, 6 and 8 p.m. Portland for Boston at 7½ a.m., and 3 p.m. Great Falls for Boston at 6½ and 9½ a.m., and 4½ p.m. Haverhill for Boston at 6½, 8½, and 11 a.m., and 4 and 6½ p.m. Reading for Boston at 6½, 7½ and 9½ a.m., 12 m., 1½, 5 and 7½ p.m. The Depot in Boston is on Haymarket Square. Passengers are not allowed to carry Baggage above \$50 in value, and that personal Baggage, unless notice is given, and an extra amount paid, at the rate of the price of a Ticket for every \$500 additional value.
1y31 CHAS. MINOT, *Super't.*

NEW YORK & HARLEM RAILROAD CO.—Summer Arrangement.

On and after Friday, May 1st, 1846, the cars will run as follows:

Leave City Hall for Yorkville, Harlem and Morrianna, at 7, 8, 9, 10 and 11 a. m., and at 1, 2, 3 30, 4 30, 5, 6, and 6 30 p. m.

Leave City Hall for Fordham and Williams' Bridge, at 7, 10 and 11 a. m., and at 2, 3 30, 5, and 6 30 p. m.

Leave City Hall for Hunt's Bridge, Bronx, Tuckahoe, Hart's Corners and White Plains, at 7 and 10 a. m., and at 2 and 5 p. m.

Leave Harlem and Yorkville, at 7 10, 8 10, 9, 10, 11 10 a. m., and at 12 40, 2, 3 10, 5 10, 5 30, 6 10, and 7 p. m.

Leave Williams' Bridge and Fordham, at 6 45, 7 45, and 10 45 a. m., and at 12 15, 2 45, 4 45, and 5 45 p. m.

Leave White Plains, at 7 and 10 a. m., and at 2 and 5 p. m.

The freight train will leave the City Hall at 1 o'clock, p. m., and leave White Plains at 1 o'clock in the morning.

On Sundays, the White Plains train will leave the City Hall at 7 a. m. and 5 30 p. m.; will leave White Plains at 7 a. m. and 6 p. m.

On Sundays, the Harlem and Williams Bridge trains will be regulated according to the state of the weather.
1y18

SUMMER ARRANGEMENT.—NEW YORK AND ERIE RAILROAD LINE, from April 1st until further notice, will run daily (Sundays excepted) between the city of New York and Middletown, Goshen, and intermediate places, as follows:

FOR PASSENGERS—
Leave New York at 7 A. M. and 4 P. M.
" Middletown at 6½ A. M. and 5½ P. M.
FARE REDUCED TO \$1 25 to Middletown—way in proportion. Breakfast, supper and berths can be had on the steamboat.

FOR FREIGHT—
Leave New York at 5 P. M.
" Middletown at 12 M.

The names of the consignee and of the station where to be left, must be distinctly marked upon each article shipped. Freight not received after 5 P. M. in New York.

Apply to J. F. Clarkson, agent, at office corner of Duane and West sts. H. C. SEYMOUR, *Sup't.*
March 25th, 1846.

Stages run daily from Middletown, on the arrival of the afternoon train, to Millford, Carbondale, Honesdale, Montrose, Towanda, Owego, and West; also to Monticello, Windsor, Binghamton, Ithaca, etc., etc. Agent on board.
13 lf

BOSTON AND ALBANY.—WESTERN RAILROAD.—Fare Reduced.

1846. Spring Arrangement. 1846 Commencing April 1st.

Passenger trains leave daily, Sundays excepted—
Boston 7½ p. m. and 4 p. m. for Albany.
Albany 6½ " and 2½ " for Boston.
Springfield 7 " and 1 " for Albany.
Springfield 7 " and 1½ " for Boston.

Boston, Albany and Troy:
Leave Boston at 7½ a. m., arrive at Springfield at 12 m., dine, leave at 1 p. m., and reach Albany at 6½ p. m.

Leave Boston at 4 p. m., arrive at Springfield at 8 p. m., lodge, leave next morning at 7, and arrive at Albany at 12½ m.

Leave Albany at 6½ a. m., arrive at Springfield at ½ m., dine, leave at 1½ p. m., and arrive at Boston 6½ p. m.

Leave Albany at 2½ p. m., arrive at Springfield at 8½ p. m., lodge, leave next morning at 7, and arrive at Boston at 12 m.

The trains of the Troy and Greenbush railroad connect with all the above trains at Greenbush.

Fare from Boston to Albany, \$5; fare from Springfield to Boston or Albany, \$2 75.

Merchandise trains run daily (Sundays excepted) between Boston, Albany, Troy, Hudson, Northampton, Hartford, etc.

For further information apply to C. A. Read, agent, 27 State street, Boston, or to S. Witt, agent, Albany.
JAMES BARNES,
Superintendent and Engineer.

Western Railroad Office,
Springfield, April 1, 1846. } 14 1y

TROY RAILROADS.—IMPORTANT NOTICE.

Troy and Greenbush Railroad, forming a continuous track from Boston to Buffalo and Saratoga Springs.

This road is new, and laid with the heaviest iron H rail. Trains will always be run on this road connecting at Greenbush each way with the trains to and from Boston and intermediate places, leaving Greenbush daily at 11 p.m. and 6 p.m., or on arrival of the trains from Boston; leave Troy at 7½ a.m. and 4½ p.m., or to connect with trains to Boston.

Trains also run hourly on this road between Troy and Albany. Running time between Greenbush and Troy, 15 minutes.

TROY AND SCHENECTADY RAILROAD.

This road is laid its entire length with the heaviest H rail—which is not the fact with the road from Albany. Trains will always be run on this road connecting each way, to and from Buffalo and intermediate places. Leave Troy for Buffalo at 7½ a.m. and 1 p.m. and 6½ p.m., or to connect with the trains for the west; leave Schenectady at 2½ a.m., 8½ a.m., 1 p.m. and 3½ p.m., or on arrival of the trains from Buffalo and intermediate places.

TROY AND SARATOGA RAILROAD.

THE ONLY DIRECT ROUTE.

No change of passenger, baggage or other cars on this route. Cars leave Troy for Ballston, Saratoga Springs, Lake George and White Hall at 7½ a.m., (arriving one hour in advance of the train from Albany,) and at 3½ p.m. Returning, leave Saratoga at 9 a.m. and 3½ p.m., (reaching Troy in time for the evening boats to New York.) Cars also leave Troy for the Burrough at 3½ p.m. and 7 p.m., connecting with packet boats for the north. This takes passengers from New York and Boston to Montreal in 44 hours.

N.B. Travellers will find the routes through Troy most convenient and economical, and as expeditious as any other. The steamboats to and from New York land within a few steps of the railroad office, and passengers are taken up and landed by the different railroad lines at the doors of principal hotels, thus saving all necessity for, and annoyance from, hack drivers, cabmen, runners, etc.

Aug. 3, 1846.

1y 32

THE BEST RAILROAD ROUTE TO THE Lake and Buffalo, from Cincinnati.

Take Cars to Xenia, 65 miles; take Stage to Mansfield, 88 miles; thence by Cars to Sandusky, 56 miles to the Lake; thence Steamboat to Buffalo, 230 miles.

Fare from Cincinnati to Sandusky \$8 00
" " Sandusky to Buffalo, Cabin 6 00
" " " " Steerage 4 50

Fare by this route, although the cheapest across the state, will be reduced in a short time, railroad lengthened, and speed increased.

Leave Cincinnati in the morning, arrive at Columbus at night.

Leave Columbus in the morning, arrive at Sandusky same day.

Leave Sandusky, by Boat, in the morning, arrive at Buffalo next morning in time for the Cars north and east for Niagara Falls, Canada, Saratoga Springs, Troy, Albany, Boston, New York, Washington, or Philadelphia.

Passengers should not omit to pay their fare through from Cincinnati to Sandusky, or from Columbus to Sandusky via Mansfield; as this route is the only one that secures 56 miles [this road is run over in 2h. 50m.] most railroad which is new, and is the shortest, cheapest and most expeditious across the state.

Fares on the New York railroads are about to be reduced.

B. HIGGINS, Sup't, etc.

M. & S. C. R. R. Co.

Sandusky, Ohio.

RAILROAD IRON.—THE "MONTGOMERY" Iron Company, Danville, Pa., is prepared to execute orders for the heavy Rail Bars of any pattern now in use, in this country or in Europe, and equal in every respect in point of quality. Apply to **MURDOCK, LEAVITT & Co.**

Corner of Cedar and Greenwich Sts.

49 1y 10

NEW RAILROAD ROUTE FROM Buffalo to Cincinnati.

Passengers destined for Columbus and Cincinnati, Louisville, Ky., St. Louis, Mo., Memphis, Tenn., Vicksburg, Natchez, New Orleans, and all intermediate ports, will find a new, and the most expeditious and comfortable Route, by taking Steamboats at Buffalo, landing at Sandusky City, Ohio, distance 230 miles.

From thence by Cars, over the Mansfield Railroad which is new and just opened [laid with heavy Iron,] to Mansfield, distance 56 "

Thence by Stage via Columbus to Xenia over gravel and Macadamized Road, (the best in the state,) in new coaches, distance 88 "

Thence, over the Little Miami Railroad, from Xenia to Cincinnati, distance 65 "

TIME.

From Buffalo to Sandusky 24 hours.
Leave Sandusky 5 a.m. to Columbus 14 "
From Columbus to Cincinnati 15 "

Or say 30 hours from Sandusky to Cincinnati over this route, including delays.

FARE.

From Buffalo to Sandusky, Cabin \$6 00
" " " " Steerage 3 00
" Sandusky to Columbus 4 50
" " through to Cincinnati 8 00

Passengers should not omit to pay their fare through from Sandusky City to Cincinnati and take receipts availing themselves of the benefit of a contract existing between the said Railroad and Stage Co's, securing 121 miles travel by good Railroad and 88 miles by Stage, in crossing from Lake Erie to the Ohio river, in the space of 30 hours.

Passengers destined for St. Louis, or any point below on the Mississippi, will save by taking this route, from 4 to 6 days time and travel, and nearly half the expense, over the Chicago and Peoria route to the above places.

Fare by this route, although the cheapest, will in a short time be reduced, Railroad lengthened, and speed increased.

B. HIGGINS, Sup't, etc.

M. & S. C. R. R. Co.

Sandusky City, Ohio.

BALTIMORE AND OHIO RAILROAD.

MAIN STEM. The Train carrying the Great Western Mail leaves Baltimore every morning at 7½ and

Cumberland at 8 o'clock, passing Ellicott's Mills, Frederick, Harpers Ferry, Martinsburgh and Hancock, connecting daily each way with the Washington Trains at the Relay House seven miles from Baltimore, with the Winchester Trains at Harpers Ferry—with the various railroad and steamboat lines between Baltimore and Philadelphia and with the lines of Post Coaches between Cumberland and Wheeling and the fine Steamboats on the Monongahela Slack Water between Brownsville and Pittsburgh. Time of arrival at both Cumberland and Baltimore 5½ P. M. Fare between those points \$7, and 4 cents per mile for less distances. Fare through to Wheeling \$11 and time about 36 hours, to Pittsburgh \$10, and time about 32 hours. Through tickets from Philadelphia to Wheeling \$13, to Pittsburgh \$12. Extra train daily except Sundays from Baltimore to Frederick at 4 P. M., and from Frederick to Baltimore at 8 A. M.

WASHINGTON BRANCH. Daily trains at 9 A. M. and 5 P. M. and 12 at night from Baltimore and at 6 A. M. and 5½ P. M. from Washington, connecting daily with the lines North, South and West, at Baltimore, Washington and the Relay house. Fare \$1 60 through between Baltimore and Washington, in either direction, 4 cents per mile for intermediate distances. s13y1

THE SUBSCRIBER IS PREPARED TO execute at the Trenton Iron Works, orders for Railroad Iron of any required pattern, and warranted equal in every respect in point of quality to the best American or imported Rails. Also on hand and made to order, Bar Iron, Braziers' and Wire Rods, etc., etc.

PETER COOPER, 17 Burling Slip.
New York.

BALTIMORE AND SUSQUEHANNA Railroad.—Reduction of Fare.

Morning and Afternoon Trains between Baltimore and York.—The Passenger trains run daily, except Sunday, as follows:

Leaves Baltimore at 9 a.m. and 3½ p.m.
Arrives at 9 a.m. and 6½ p.m.
Leaves York at 5 a.m. and 3 p.m.
Arrives at 12½ p.m. and 8 p.m.
Leaves York for Columbia at 1½ p.m. and 8 a.m.
Leaves Columbia for York at 8 a.m. and 2 p.m.

FARE.

Fare to York \$1 50
" Wrightsville 2 00
" Columbia 2 12½

Way points in proportion.

PITTSBURG, GETTYSBURG AND HARRISBURG.

Through tickets to Pittsburg via stage to Harrisburg \$9
Or via Lancaster by railroad 10
Through tickets to Harrisburg or Gettysburg 3

In connection with the afternoon train at 3½ o'clock, a horse car is run to Green Spring and Owings' Mill, arriving at the Mills at 5½ p.m.
Returning, leaves Owings' Mills at 7 a.m.

D. C. H. BORDLEY, Sup't.

Ticket Office, 63 North st.

31 1y

LEXINGTON AND OHIO RAILROAD.

Trains leave Lexington for Frankfort daily, at 5 o'clock a.m., and 2 p.m.

Trains leave Frankfort for Lexington daily, at 8 o'clock a.m. and 2 p.m. Distance, 28 miles. Fare \$1-25.

On Sunday but one train, 5 o'clock a.m. from Lexington, and 2 o'clock p.m. from Frankfort.

The winter arrangement (after 15th September to 15th March) is 6 o'clock a.m. from Lexington, and ma. 9. from Frankfort, other hours as above.

35 1y

SOUTH CAROLINA RAILROAD.—A Passenger Train runs daily from Charleston,

on the arrival of the boats from Wilmington, N. C., in connection with trains on the Georgia, and Western and Atlantic Railroads—and by stage lines and steamers connects with the Montgomery and West Point, and the Tuscumbia Railroad in N. Alabama.

Fare through from Charleston to Montgomery daily \$26 50
Fare through from Charleston to Huntsville, Decatur and Tuscumbia 22 00

The South Carolina Railroad Co. engage to receive merchandise consigned to their order, and to forward the same to any point on their road; and to the different stations on the Georgia and Western and Atlantic railroad; and to Montgomery, Ala., by the West Point and Montgomery Railroad.

1y25 JOHN KING, Jr, Agent.

CENTRAL RAILROAD-FROM SAVANNAH to Macon. Distance 190 miles.

This Road is open for the transportation of Passengers and Freight. Rates of Passage, \$8 00. Freight—On weight goods generally... 50 cts. per hundred.

On measurement goods 13 cts. per cubic ft.
On brls. wet (except molasses and oil) \$1 50 per barrel.

On brls. dry (except lime) ... 80 cts. per barrel.
On iron in pigs or bars, castings for mills, and unboxed machinery 40 cts. per hundred.

On hhd. and pipes of liquor, not over 120 gallons \$5 00 per hhd.
On molasses and oil \$6 00 per hhd.

Goods addressed to F. WINTER, Agent, forwarded free of commission. THOMAS PURSE, Gen'l. Sup't. Transportation.

MANUFACTURE OF PATENT WIRE

Rope and Cables for Inclined Planes, Standing Ship Rigging, Mines, Cranes, Tillers, etc., by JOHN A. ROEBLING, Civil Engineer, Pittsburgh, Pa.

These Ropes are in successful operation on the planes of the Portage Railroad in Pennsylvania, on the Public Slips, on Ferries and in Mines. The first rope put upon Plane No. 3, Portage Railroad, has now run 4 seasons, and is still in good condition.

2v19 1y

CENTRAL AND MACON AND WESTERN Railroads, Ga.—These Roads with the Western and Atlantic Railroad of the State of Georgia, form a continuous line from Savannah to Oothcaloga, Ga., of 371 miles, viz:

Savannah to Macon—Central Railroad 190
Macon to Atlanta—Macon and Western 101
Atlanta to Oothcaloga—Western and Atlantic 80
Goods will be carried from Savannah to Atlanta and Oothcaloga, at the following rates, viz:

	To Atlanta.	To Oothcaloga.
On Weight Goods—Sugar, Coffee, Liquor, Bagging, Rope, Butter, Cheese, Tobacco, Leather, Hides, Cotton Yarns, Copper, Tin, Bar & Sheet Iron, Hollow Ware & Castings.....	\$0 50	\$0 75
Flour, Rice, Bacon in Casks or boxes, Pork, Beef, Fish, Lard, Tallow, Beeswax, Mill Gearing, Pig Iron and Grind Stones.....	0 50	0 62½
On Measurement Goods—Boxes of Hats, Bonnets and Furniture, per cubic foot.....	0 20	0 26
Boxes and Bales of Dry Goods, Saddlery, Glass, Paints, Drugs and Confectionary, per cubic foot.....	0 20	pr. 100lbs. 35
Crockery, per cubic foot.....	0 15	" " 35
Molasses and Oil, per hhd., (smaller casks in proportion). 9 00		12 50
Ploughs, (large,) Cultivators, Corn Shellers, and Straw Cutters, each.....	1 25	1 50
Ploughs, (small,) and Wheelbarrows.....	0 80	1 05
Salt, per Liverpool Sack.....	0 70	0 95

Passage—Savannah to Atlanta, \$10; Children, under 13 years of age, half price, Savannah to Macon, \$7.

Goods consigned to the subscriber will be forwarded free of Commissions.

Freight may be paid at Savannah, Atlanta or Oothcaloga.

F. WINTER, Forwarding Agent, C. R. R. Savannah, Aug. 15th, 1846. 1y34

GEORGIA RAILROAD, FROM AUGUSTA TO ATLANTA—171 MILES.

AND WESTERN AND ATLANTIC RAILROAD FROM ATLANTA TO OOTHCALOGA, 80 MILES.
This Road in connection with the South Carolina Railroad and Western and Atlantic Railroad now forms a continuous line, 388 miles in length, from Charleston to Oothcaloga on the Oostenaula River, in Cass Co., Georgia.

Rates of Freight, and Passage from Augusta to Oothcaloga.

On Boxes of Hats, Bonnets, and Furniture per foot.....	15 cts.
" Dry goods, shoes, saddlery, drugs, etc., per 100 lbs.....	95 "
" Sugar, coffee, iron, hardware, etc.....	65 "
" Flour, bacon, mill machinery, grindstones, etc.....	33½ "
" Molasses, per hogshead \$9.50; salt per bus. 20 "	
" Ploughs and cornshellers, each.....	75 "
Passengers \$10.50; children under 12 years of age half price.	
Passengers to Atlanta, head of Ga. Railroad, \$7.	
German or other emigrants, in lots of 20 or more, will be carried over the above roads at 2 cents per mile.	

Goods consigned to S. C. Railroad Co. will be forwarded free of commissions. Freight may be paid at Augusta, Atlanta, or Oothcaloga.

J. EDGAR THOMSON, Ch. Eng. and Gen. Agent. Augusta, Oct. 21 1845. *44 1y

BACK VOLUMES OF THE RAILROAD JOURNAL for sale at the office, No. 23 Chambers street

RAILROAD IRON AND LOCOMOTIVE Tyres imported to order and constantly on hand A. & G. RALSTON 4 South Front St., Philadelphia. Mar. 20th

THE WESTERN AND ATLANTIC Railroad.—This Road is now in operation to Oothcaloga, a distance of 80 miles, and connects daily (Sundays excepted) with the Georgia Railroad.

From Kingston, on this road, there is a tri-weekly line of stages, which leave on the arrival of the cars on Tuesday, Thursday and Saturday, for Warrenton, Huntsville, Decatur and Tusculumbia, Alabama, and Memphis, Tennessee.

On the same days, the stages leave Oothcaloga for Chattanooga, Jasper, Murfreesborough, Knoxville and Nashville, Tennessee.

This is the most expeditious route from the east to any of these places.

CHAS. F. M. GARNETT, Chief Engineer. Atlanta, Georgia, April 16th, 1846. 1y1

LITTLE MIAMI RAILROAD.—1846. Summer Arrangement.

Two passenger trains daily.

On and after Tuesday, May 5th, until further notice, two passenger trains will be run—leaving Cincinnati daily (Sundays excepted) at 9 a. m. and 1½ p. m. Returning, will leave Xenia at 5 o'clock 50 min. a. m., and 2 o'clock 40 min. p. m.

On Sundays, but one train will be run—leaving Cincinnati at 9, and Xenia at 5 50 min. a. m.

Both trains connect with Neil, Moore & Co.'s daily line of stages to Columbus, Zanesville, Wheeling, Cleveland, Sandusky City and Springfield.

Tickets may be procured at the depot on East Front street.

The company will not be responsible for baggage beyond fifty dollars in value, unless the same is returned to the conductor or agent, and freight paid at the rate of a passage for every \$500 in value above that amount.

W. H. CLEMENT, Superintendent. 19

GREAT SOUTHERN MAIL LINE! VIA Washington city, Richmond, Petersburg, Weldon and Charleston, S. C., direct to New Orleans. The only Line which carries the Great Southern Mail, and Twenty-four Hours in advance of Bay Line, leaving Baltimore same day.

Passengers leaving New York at 4½ P.M., Philadelphia at 10 P.M., and Baltimore at 6½ A.M., proceed without delay at any point, by this line, reaching Richmond in eleven, Petersburg in thirteen and a half hours, and Charleston, S. C., in two days from Baltimore.

Fare from Baltimore to Charleston.....\$21 00

" " " Richmond..... 6 60

For Tickets, or further information, apply at the Southern Ticket Office, adjoining the Washington Railroad Office, Pratt street, Baltimore, to 1y14

STOCTON & FALLS, Agents.

MARAMEC IRON WORKS FOR SALE.

By Authority of a power of Attorney from Messrs. Massey and James, I will sell at Public Auction, at the Court House in the city of St. Louis, on MONDAY, the 2nd day of November next, the above named valuable IRON WORKS—together with 8,000 ACRES OF LAND, more or less, on which there are several valuable and productive Farms open and in cultivation.

The Maramec Iron Works are situated at the Maramec Big Spring, in Crawford Co., Mo., and consist of 1 BLAST FURNACE; 1 AIR FURNACE;

1 REFINING FORGE, with large Hammer for making Blooms and Anchovies;

2 CHEFFERY FORGES for Drawing Bar Iron;

1 ROLLING MILL for Rolling Blooms into Bars and Plates;

1 SAW AND 1 GRIST MILL,

All within 300 Yards of the head of the spring. There are 2 large frame Coal Houses, and all other Buildings necessary, such as Shops and Houses for the workmen.

This Spring is one of the largest in Missouri, discharging at the lowest time 7,000 cubic feet of water per minute. The Ore Bank from which the Ore has been heretofore taken is about 600 yards from the furnace; it is the Specular Iron Ore, the best for making Bar Iron, and the quantity inexhaustible.—It is an Iron Mountain, 400 feet above the level of the Maramec River; the ore is entirely uncovered, and there is an easy descent and a good road from it to the furnace.

The lands have been carefully selected by one of the owners with a view to the interest and convenience of the Works, and are situated principally on the Maramec River and its tributaries, embracing the best bottom lands and water powers. The following detached tracts, comprized in the above quantity, were selected for the advantages they possess;

183½ ACRES in T. 40 N. of R. 8 W. in Sec. 3, near Wherry's Mill, in Osage Co.; entered to secure a very valuable Mill power on the Branca Spring and a good landing on the Gasconade River.

80 ACRES on Benton's Creek, 12 miles from the Works; entered to secure an extensive and valuable Ore Bank 2½ miles from the Maramec, at a point where there is ample water power.

320 ACRES in T. 38 N. of R. 4 W. in Sec. 23 and 28, affording an extensive and valuable water power on the Maramec river.

160 ACRES in T. 37 N. of R. 3 W. in Sec. 4, embraces two inexhaustible and valuable Ore Banks and is 1½ miles from Water power sufficient for a furnace and Grist Mill, and is distant 6 miles from the above site on the Maramec.

80 ACRES in T. 37 N. of R. 8 W. in Sec. 33, including an extensive bank of excellent Ore, and distant 1½ miles from water power on the waters of the Gasconade River, in Pulaski Co., sufficient for Furnace and Mills. All those Banks are of the same kind as the one at the Works, and deemed inexhaustible.

1 LOT, containing nearly one Acre, on the South Bank of the Missouri River, 4 Miles above the town of Hermann, purchased for a warehouse and landing, and is one of the best landings on the River.

The lands above described are well timbered, and have been selected with a view to have an ample supply of wood and coal, for fences, building and other purposes. There are on the land valuable quarries of Limestone well adapted for Fluxes for the Ore, and also good quarries of Rock suitable for building. There are also on the land a great number the finest kind of Springs. A large portion of the lands are bottoms well adapted to the production of Corn and other crops. The Works are situated in a very pleasant and healthful part of the country. The Maramec ore is believed to be admirably adapted to the manufacture of steel.

A further description of the property at this time is considered unnecessary, as those wishing to purchase will no doubt view the property, which will be shown by the Agent, residing at the works.

The terms of payment required will be one-third of the purchase money in hand and the balance in three equal annual payments, secured by mortgage on all the property.

A more particular description of the property will be given, and further conditions of the sale made known, on the day of sale.

JNO. F. ARMSTRONG, Agent. St. Louis, June 6, 1846.

The Louisville, (Ky.) Journal, Cincinnati Gazette, Tribune (Portsmouth, O.) Nashville Whig, Pittsburg Gazette, National Intelligencer, United States Gazette, (Phila.) Railroad Journal (N. Y.) and Boston Atlas, will publish the above once a week until the 20th day of October next, and send bills to this office for settlement, and mark price on first paper. 18c25

TO RAILROAD COMPANIES AND MANUFACTURERS of railroad Machinery. The subscribers have for sale Am. and English bar iron, of all sizes; English blister, cast, shear and spring steel; Juniata rods; car axles, made of double refined iron; sheet and boiler iron, cut to pattern; tiers for locomotive engines, and other railroad carriage wheels, made from common and double refined B. O. iron; the latter a very superior article. The tires are made by Messrs. Baldwin & Whitney, locomotive engine manufacturers of this city. Orders addressed to them, or to us, will be promptly executed.

When the exact diameter of the wheel is stated in the order, a fit to those wheels is guaranteed, saving to the purchaser the expense of turning them out inside. THOMAS & EDMUND GEORGE, ja45 N. E. cor. 12th and Market sts., Philad., Pa.



RICH & CO'S IMPROVED PATENT SALAMANDER SAFES.

Warranted free from dampness, as well as fire and thief proof.

Particular attention is invited to the following certificates, which speak for themselves:

TEST No. 10.

Certificate from Mr. Silas C. Field, of Vicksburg, Mississippi.

On the morning of the 14th ult., the store owned and occupied by me in this city, was, with its contents, entirely consumed by fire. My stock of goods consisted of oil, rosin, lard, pork, sugar, molasses, liquors, and other articles of a combustible nature, in the midst of which was one of Rich's Improved Patent Salamander Safes, which I purchased last October of Mr. Isaac Bridge, New Orleans, and which contained my books and papers. This safe was red hot, and did not cool sufficiently to be opened until 16 hours after it was taken from the ruins. At the expiration of that time it was unlocked, when its contents proved to be entirely uninjured, and not even discolored. I deem this test sufficient to show that the high reputation enjoyed by Rich's Safes is well merited.

S. C. FIELD.

Vicksburg, Miss., March 9th, 1846.

Certificate from Judge Battaile, of Benton, Mississippi.

In October last I purchased one of Rich's Improved Salamander Safes, which was in the fire at the burning of my law office, and several adjoining buildings in this place, on the 17th of November last, at about half-past one o'clock A. M. of that day. The building was entirely consumed; and I take pleasure in stating that my papers in said safe were preserved without injury. A receipt book which was in said safe, had the glue drawn out of its leather back by the heat, and the back broken; but the leaves of the book, and the writing thereon, were entirely uninjured; and some of the writing which was of blue ink, was also left wholly uneffaced and not in the least faded. Said safe was by the fire heated perfectly red hot, and I do not hesitate to say, that said safe is a perfect security against fire. But the safe tumbled over during the fire, and being heated red hot, the outer sheeting of the door became pressed in, and the bolts of the lock bent, so that it could not be unlocked, and I had to have it broken open.

JOHN BATTAILE.

Benton, Miss., December 27, 1845.

Still other Tests in the Great Fire of July 19, 1845.

The undersigned purchased of A. S. Martin, No. 138½ Water street, one of Rich's Improved Patent Salamander Safes, which was in our store, No. 54 Exchange place. The store was entirely consumed in the great conflagration on the morning of the 19th inst. The safe was taken from the ruins 52 hours after, and on opening it, the books and papers were found entirely uninjured by fire, and only slightly wet—the leather on some of the books was parched by the extreme heat.

RICHARDS & CRONKHITE.

New York, 21st July, 1845.

One of Rich's Improved Salamander Safes, which I purchased on the 2d of June last of A. S. Marvin, 138½ Water street, agent for the manufacturer, was exposed to the most intense heat during the late dreadful conflagration. The store which I occupied, No. 46 Broad street, was entirely consumed; the safe fell from the 2d story, about 15 feet, into the cellar, and remained there 14 hours, and when found, I am told, and from its appearance afterwards, should judge that it had been heated to a red heat. On opening it, the books and papers were found not to have been touched by fire. I deem this ordeal sufficient to confirm fully the reputation that Rich's safe has already obtained for preserving its contents against all hazards.

(Signed.)

WM. BLOODGOOD.

New York, 21st July, 1845.

The above safes are finished in the neatest manner, and can be made to order at short notice, of any size and pattern, and fitted to contain plate, jewelry, etc. Prices from \$50 to \$500 each. For sale by

A. S. MARVIN, General Agent,

138½ Water st., N. Y.

Also by Isaac Bridge 76 Magazine street, New Orleans.

Also by Lewis M Hatch, 130 Meeting street Charleston, S. C.

16 11

CUSHMAN'S COMPOUND IRON RAILS

etc. The Subscriber having made important improvements in the construction of rails, mode of guarding against accidents from insecure joints, etc.—respectfully offers to dispose of Company, State Rights, etc., under the privileges of letters patent to Railroad Companies, Iron Founders, and others interested in the works to which the same relate. Companies reconstructing their tracks now have an opportunity of improving their roads on terms very advantageous to the varied interests connected with their construction and operation; roads having in use flat bar rails are particularly interested, as such are permanently available by the plan.

W. Mc. C. CUSHMAN, Civil Engineer,
Albany, N. Y.

Mr. C. also announces that Railroads, and other works pertaining to the profession, may be constructed under his advice or personal supervision. Applications must be post paid.

KEARNEY FIRE BRICK. F. W.

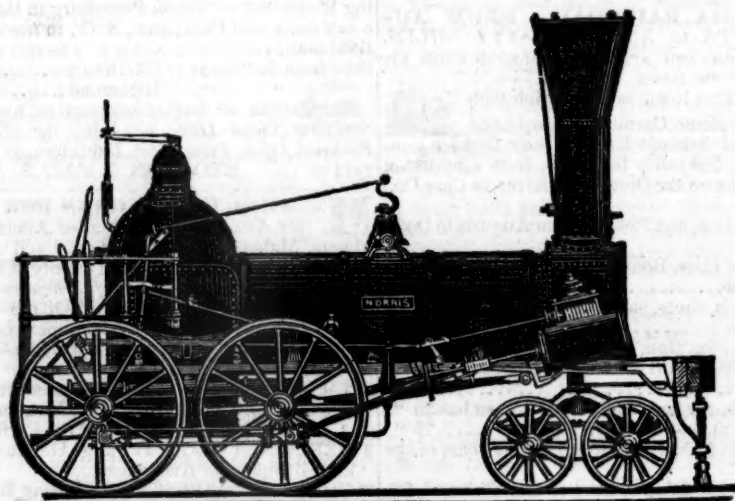
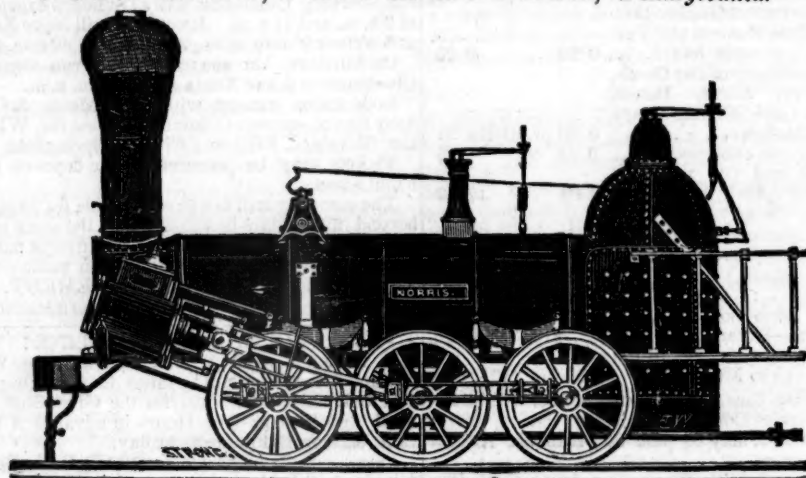
BRINLEY, Manufacturer, Perth Amboy, N. J. Guaranteed equal to any, either domestic or foreign. Any shape or size made to order. Terms, 4 mos. from delivery of brick on board. Refer to

James P. Allaire, }
Peter Cooper, } New York.
Murdock, Leavitt & Co. }
J. Triplett & Son, Richmond, Va.
J. R. Anderson, Tredegar Iron Works, Richmond, Va.
J. Patton, Jr. } Philadelphia, Pa.
Colwell & Co. }
J. M. L. & W. H. Scovill, Waterbury, Conn.
N. E. Screw Co. } Providence, R. I.
Eagle Screw Co. }
William Parker, Supt. Bost. and Worc. R. R.
New Jersey Malleable Iron Co., Newark, N. J.
Gardiner, Harrison & Co. Newark, N. J.
25,000 to 30,000 made weekly.

35 1y

NORRIS' LOCOMOTIVE WORKS.

BUSH HILL, PHILADELPHIA, Pennsylvania.



MANUFACTURE their Patent 6 Wheel Combined and 8 Wheel Locomotives of the following descriptions, viz:

Class	1,	15 inches	Diameter of	Cylinder,	x 20 inches	Stroke.
"	2,	14	"	"	x 24	"
"	3,	14½	"	"	x 20	"
"	4,	12½	"	"	x 20	"
"	5,	11½	"	"	x 20	"
"	6,	10½	"	"	x 18	"

With Wheels of any dimensions, with their Patent Arrangement for Variable Expansion. Castings of all kinds made to order: and they call attention to their Chilled Wheels, for the Trucks of Locomotives, Tenders and Cars.

NORRIS, BROTHERS.

Railway Ethics:

Being a General Review of the Operations and Effects of Railway Enterprise on the Social System.—By P. Austin Nuttall, L. L. D., etc.

Railways appear destined to wield a mighty influence over all the important interests of society, and to produce, ere long, the most eventful changes in the entire aspect of the social system. Not only private individuals, but even sovereigns, nobles and public bodies, must ultimately bend to their universal sway and submit to their general arrangements. Neither the dicta of the law, nor military power, nor municipal privilege, will be able to resist their onward progress. The proceedings of courts of law and the movements of the army must alike be regulated by the operations of the railway system; and its power will eventually be everywhere acknowledged.

It was not long ago that a queen's counsel at the Chester civil court, applied to the learned judge, Mr. Justice Williams, to adjourn the court to a certain hour the next morning, on the plea that, as the railway trains did not arrive before that time, it would be a great convenience to the special jurors who were summoned for that day, and who, in consequence, were not likely to be in court before the hour named. To this application his lordship was obliged to defer, and for a very special reason, that he had no remedy, either in law or equity—neither the common nor the statute law, according to his lordship's view, presented any analogous case by which the evil could be obviated. In truth his lordship saw no alternative but that of making a virtue of necessity. He very pointedly observed, that the railways "had become the masters of almost all the trade and everything else in the country; and even her majesty had to submit to their arrangements. He supposed, therefore, as he was only one of her majesty's commissioners, no alternative remained for him but quietly to strike and submit likewise."

It may be perfectly true that "the railways have become the masters of almost everything," and that judges of assize, as well as sovereigns "have no alternative but quietly to strike and submit." But while the railway thus imperatively reduces "dominations and powers" to its sovereign will, the vast advantages therewith associated, infinitely more than counterbalance the imaginary inconveniences that may occasionally arise. Unlike the social despotisms of previous ages, it is calculated to confer innumerable benefits on the whole of the human race.

Thus, if railway transit has its advantages arising from the consequences of locomotive monopoly, the benefits, on the contrary, are of so transcendent a character that all rational men willingly submit to the partial evil for the sake of the general good conferred on the great masses of society. For its benefits are every day more and more developing themselves. It imparts a regularity and dispatch in the transaction of business, and in all the ordinary affairs of men, hitherto unknown in the history of any age or country.

Sovereigns or dynasties may be in danger—governments may vacillate—the law may be delayed or set at nought—armies may be retarded in their march—fleets may be delayed and the winds of the ocean may be adverse; but the railway trains can be rendered almost as certain as the diurnal motions of the earth, as undeviating as the annual recurrence of the seasons, and as sure as the everflowing tides of the circumfluent ocean. Hence the immeasurable advantages which may be expected to arise, not only as regards our own domestic intercommunity, but as affecting all the nations of the civilized world.

It has now become the fashion to consult the map of Great Britain or of Europe, not for the sake of ascertaining the direction or distances of roads, or of learning what vehicles run along them, but for the more important purpose of determining the course and situation of the railway lines—what is their length, to what towns they lead, what branches diverge from the main trunk, what are the times of departure and arrival of each train, and what is the expense of each class? A map of England, Scotland or Ireland, without a correct outline of all the railway lines, whether completed or in progress, would be utterly valueless; a mere chart of high roads being no longer of use to the traveller. Nor can this be confined to the British territories alone. We find that every continental map of any estimation is now published with complete representations of all the railway lines; and the old beaten roads, which formerly constituted so prominent a feature in geographical charts, are either altogether omitted, or considered of such secondary importance, as to be almost lost sight of.

France, Belgium, Germany, Holland, Prussia, Austria and Russia have already succeeded in carrying railway transit into active operation. It is now rapidly superseding all the local usages and antiquated modes of travelling; and thus one distant nation communicates with another with more ease and certainty than our ancestors, in "the good old times," could have visited a neighboring county, or travelled through any adjoining district to which they happened to be strangers.

In the course of a few years, France, which is devoting all her energies to railway enterprise, under the especial auspices of the sovereign, will have a complete system of railways radiating from Paris to every important point on the frontiers of the kingdom—to Calais, Boulogne, Dieppe, Havre and Cherbourg; to Brest, Nantes, Bordeaux and Bayonne; to Cete, Montpellier, Marseilles and Toulon; to the Belgian frontier, Switzerland and Piedmont; and, at the same time unite all the great emporia of the silk, cotton, woollen and other manufactures with the seaports and the capital.

Belgium, too, is already intersected with well-planned railways, to which her sovereign has devoted the most unremitting attention. They extend from the sea to the Prussian territories, and from the Dutch to the French frontiers. The German states are also vying with each other in constructing

great and important lines of railway, to which immense capital and labor have been applied.

Already, with the exception of very short intervals, the traveller may pass from Hamburg in the north, to Leipsig, Berlin, Breslau, Prussia and Saxony; and Austria, Bavaria, Wurtemberg and Baden, in the south, are constructing lines of great length and utility.

Thus the period will soon arrive when it will be possible to travel and transmit merchandise uninterruptedly, by railway, from Hamburg to Vienna and Trieste, from Ostend to Switzerland and Italy, and from the Rhine to the Elbe, the Oder and the Danube.

The times of departure and arrival of all the leading trains of France, Belgium and Germany are every day assuming a regularity and certainty of which no example exists in the ancient modes of continental travelling, which used to be proverbial for its dilatoriness and incertitude. The great difficulties which George the Fourth had to encounter during his progress through Germany (when the peasantry were frequently called upon to drag his carriage through the deep mud holes of the road,) are doubtless familiar to the reader, and present a curious contrast between the ancient and modern modes of travelling. Formerly, not even royalty could be exempt from difficulties and delays;—and at the present time not the humblest plebeian is subject to obstruction or annoyance, but at a moderate cost is enabled to travel not only from town to town, but from one country to another, with ease, certainty and dispatch.

When all these advantages are taken into consideration, it will be matter of little surprise, if we should find every class of society and every important interest becoming subservient to railway transit; for it is certain that eventually all the ancient modes of conveyance must be abolished, and as far as locomotive powers extend, the prince and the peer, the citizen and the peasant, will be reduced to the same level. With truth, then, might Judge Williams exclaim, that "the railways had become the masters of almost all the trade, and everything else in the country," and that even majesty itself "had to submit to their arrangements." Thus truly prophetic were the words of Mr. Thomas Gray, (whose early exertions in the cause of railways, above a quarter of a century ago, have been already noticed in these essays,) that "the system would extend over all countries," that "emperors, kings and governments would be its defenders," that "all distances would disappear," and that it would be "the mainspring of the civilization of the world!"

As predicted by Gray, and admitted by Mr. Justice Williams, the railway system is assuming an all-paramount importance in every department of political and social life, to which kings and governments must alike submit. In war, if such a calamity should unhappily supervene, it, with the astonishing powers of the electric telegraph, will form the most powerful instrument in repelling the invader by the rapid concentration of military force. In times of political convulsion

or national anarchy, popular outrage by the same means will be immediately suppressed. In the calm of peace and the reign of the social arts, which the railway system must necessarily tend to consolidate, it will form a more powerful agent in promoting the domestic trade of the country than even the most sanguine imagination could ever have contemplated. Wherever the railways penetrate a purely agricultural district, much as they were deprecated by the landed interest when in their infancy, they effect a complete revolution, not only in the mode of transit, but in the price of articles, and soon establish a certain and regular course of exchange between the agricultural and the mining and manufacturing productions of the respective districts; and this without regard to the distance which separates them—the question never being entertained as to distance, but simply whether there is a continuous railway line.

Formerly, where iron and coal were dear, grain and meat were cheap; or otherwise, where the minerals were cheap, agricultural produce was dear—those inconvenient results arising from the want of markets, or from the absence of means for effecting a ready exchange of the surplus commodities of one district for those of another. When the Bristol and Exeter railway penetrated Devonshire it opened to the farmers all the markets of the town population up to London; and the price of butter, poultry, eggs and vegetables immediately rose in the Exeter market. The farmers and peasantry, in return, could buy coal (as well as many foreign products which they never before enjoyed) at a considerably reduced price; while the demand for wooden faggots, which (in the absence of coal) were previously an article in great demand, almost entirely ceased. In the evidence before the gauge commissioners, it was stated by Capt. Laws, that from 12 to 14 tons of cucumbers arrived at Manchester in one day from the neighborhood of Rugby alone—thus affording a great source of profit to a poor rural district, from the disposal of an article which from its great abundance in that district, would have been comparatively valueless without the means of that cheap and rapid conveyance which railway transit presents. At the present time there are vast quantities, amounting to many tons, of salmon, soles, cod, lobsters and other fish, sent daily by railway from the London markets to the different inland towns and districts, which formerly never had the opportunity of enjoying these luxuries, because the time consumed in their conveyance by coach or wagon would have rendered them useless before they arrived at their destination.

If such be the advantages resulting from the facilities of domestic interchange, how much greater must they be when the railway communication extends to all the neighboring countries of Europe, and affords us the means of exchanging the products of our native industry for those of the most distant soils? The same benefits which are afforded to internal or domestic traffic will necessarily be extended to foreign commerce; and considering the amazing facilities of inter-

course on the continent, which the various lines will afford, can we arrive at any other conclusion than that they are calculated not only to promote the physical comforts and enjoyments of all the great human family, but ultimately to insure the highest state of social felicity to which a people can attain, by constantly supplying the means of rapid intercommunication; and thus, by stimulating the intercourse of nations, to knit together the race of beings who occupy the most distant portions of the globe, by the kindest bonds of reciprocal benevolence?—*Railway Record.*

Foreign Items.

Leslie's Improved Gas Burner.—A patent has been secured by Mr. Leslie, of Conduct street, for an improved gas burner; it consists of a hollow circular ring, with an arm, by which it is screwed to the supply pipe; instead of the combustion of the gas taking place at small orifices around the upper surface of this ring, there arises from it a pumber of small tubes, curving inwards as they ascend, and the tops approaching very near each other in a circle; the whole forming the figure of a sugar loaf, denuded of its apex, a glass chimney covering the whole in the usual way. By this arrangement every single jet is completely surrounded with atmospheric air, and a free current is secured, between the tubes and through the centre of the flame, for each jet when alight joins the others—forming a circular hollow flame of great brilliancy; the tubes may be of metal, glass or porcelain.

Ventilation in Smithies and Foundries.—**SIR:** Having visited a certain locality, I went to the church yard to see the average ages on the tombstones of the poor, which being here composed of slate, seldom last 50 years, and often only 10 or 20. It is, however, astonishing to notice how small a number of working men reach the average of other, and more healthy districts of the kingdom. I met a man, a smith, and asked him whether there were many old men about? His answer was, "How should-a-be, wi so much hard work, in smoke and bad air?" Passing by the smithy, with 10 or 12 forges and furnaces at work, the smoke issuing from the door and windows, I saw some men trying to catch a breath of air at the former, and others gasping at the latter. Is it not a disgrace to the wealthy proprietors of these large establishments, that some means of ventilation is not adopted, which would secure at least a sufficient current of pure air for breathing, and not leave the men to be thus suffocated by degrees, and brought to a lingering death, in these abodes of disease and gloom?—**A. T. J. MARTIN, Penzance, July 30.**

A Warning.—A heavy warning to engineers not to undertake works which they cannot fairly accomplish, has been administered by the law this week. Mr. Giles, the engineer, has been assessed in a penalty of not less than £4500 for the imperfections of his plans of the Dudley, Madeley and Ironbridge.

Medicinal Use of Oil in Copper Works.—**SIR:** Some years ago, a Mr. Hugh Edwards the manager of some copper smelting works

formerly existing at Hayle Copperhouse, used to distribute to the men on the works a small quantity of oil each, to counteract the effects of the arsenic, or other metallic poisons, evolved during the process of smelting, etc. Probably some of your readers can and will supply some useful information on this head, especially as it is written, "At the hand of every man's brother will I require the life of man."—**A. T. J. MARTIN, Penzance, Aug. 1.**

Orsi's Railway Blocks and Sleepers.—A patent has been secured for a peculiar form of fastening the chairs to the sleepers for railways, by which the inventor, (Mr. Orsi, of Pimlico,) proposes to obtain a fixity of gauge, give a solid and rigid support to the rails, and preserve the metal from the corrosive effects of the atmosphere. To effect these results, the chairs are cast with ears or lugs on the bottom surface, and an iron tension rod passing through them, across the line, they are rivetted thereto at the proper distance of gauge. The chairs and rods thus fixed, are then placed in a trough; and a liquid cement, such as asphalt or other bituminous substance, is poured over, and when cold, forms a complete coating of the bars and ears, preserving them from the atmosphere or wet. He claims, also, for imbedding blocks of wood in the cement, traced by transverse tension rods for ordinary chairs to be fixed by bolts and nuts.

The Stupendous Tunnel Bridge on the Holyhead Railway.—At the usual half-yearly meeting of proprietors, held at the office, on Wednesday last, the following report was read, which is of importance, as giving detailed particulars respecting the intended bridge over the Menai straits:

In the last report on the contract works, I particularly called your attention to the subject of the Britannia bridge, over the Menai straits, and to the experimental investigation which Mr. Fairbairn and Mr. Hodgkinson had undertaken, at my request, with the view of satisfactorily determining every dimension of the tubular part of the bridge.

Since that period, Mr. Hodgkinson has made several experiments, the results of which he has communicated to me verbally, and, though I am not able to submit them to you in a reduced form, I may state that I conceive them highly satisfactory, and confirmatory of those principles which led to the tubular construction of the bridge.

In addition to these experiments, Mr. Fairbairn has, with your sanction, constructed a model tube one-sixth of the actual span, having all the dimensions in due proportion.

In such a model we should, of course, expect to have a very accurate exhibition of the merits or demerits of the tubular system.

It will be in your recollection, that the preliminary experiments led to the conclusion that great care would be required to prevent the upper side of the tube from crushing; that, in short, the main object to be aimed at, was to give the top of the tube the requisite stiffness. In this respect the results obtained from the model tube have been highly satisfactory; and being upon so large a scale, may be deemed perfectly conclusive upon se-

veral very important points. The dimensions of the tube were as follows:

Length, 75 feet between the supports,
Depth, 4 feet 6 inches, and
Width, 2 feet 6 inches,

with the upper side constructed in compartments. Total weight a little above 5 tons.

Thickness of the plates in the top, 146 in., (about one-seventh of an inch.)

Thickness of the plates in the bottom, 179 in., (about one-sixth of an inch.)

Thickness of the plates at the sides, 1 in., (about one-tenth of an inch.)

When progressively loaded, the mean deflection was about one-tenth of an inch per ton; and with a load of 35 tons suspended in the middle, it gave way on the underside; the upper part not having exhibited the least sign of failure up to the moment of fracture.

Hence, therefore, we have arrived at a most interesting result, viz: that the liability of the plates on the upper side to crush, has been completely removed by the construction in compartments.

The experiments having now furnished us with the necessary means of calculating the relative thicknesses and proportions of the several parts of the tubes, we are now in a condition to contract at once for their construction. For this purpose, I recommend that they should be apportioned among half-a-dozen of the principal iron ship builders, or boiler makers, who shall undertake to deliver the same, completed in lengths, upon the works adjoining the place of erection; when the several portions forming each tube will be connected together, and the tubes fixed in their places.

In the meantime the masonry of the bridge, the erection of workshops, the manufacture of plates, and every other necessary preparation, are in a state of progress.

Railway Calls.—Calls to the extent of £800,000, for carrying on the works of different railways, have been announced as payable between the 1st and 18th of the present month.—*London Mining Journal, Aug. 8.*

Newcastle and Darlington Railway Co. Directors' Report to the Half-yearly Meeting, July 27, 1846. (Length of Road, 23 miles.)

The directors have the satisfaction to present to the proprietors the usual statement of their accounts for the half-year ending the 30th day of June last, showing a balance in favor of the company upon the revenue account of £47,759 3s. 1d.

The directors recommend that a dividend be declared upon the whole of the paid up capital at the rate of 9 per cent. per annum, after the payment of which a surplus of £2,955 3s. 11d. will remain to the credit of the company.

The directors add the usual cash statements and also the following details of the traffic for the last half-year, viz: passengers, 1st class, 51,098; 2d class, 293,070; 3d class, 166,715; government ditto, 20,591; total, 531,474. Coal and coke, 358,184 tons; lime and stone, 8,060; goods, 51,439; total, 417,683. Horses, 657; carriages, 241; dogs,

326; cattle, 10,146; sheep, 8,087; pigs, 2,526.

Capital account from December 31, 1845, to June 30, 1846.

DEBITOR.	
Amount expended to Dec., 1845..	£1,272,030 18 1
Further charges in the half-year, ending June 30, 1846, viz:	
Parliamentary expenses.....	523 12 2
Engineering and surveying.....	300 0 0
Land and conveyance.....	593 14 6
Works of roads, stations, warehouses, etc.....	12,079 16 6
Sleepers.....	43 2 6
Advertising and printing.....	554 10 0
Miscellaneous disbursements....	879 1 6
Branding Junction.....	14,430 10 1
Stock—including engines, carriages, wagons, etc.....	13,266 2 5
Balance.....	114,993 16 7
	£1,429,694 4 4

CREDITOR.	
Amount received on account of shares, interest, etc., to December, 1845.....	£890,071 4 4
Ditto of debentures.....	165,000 0 0
Ditto Branding ditto.....	232,475 0 0
Amount received on account of shares during the half-year ending June 30, 1846. £135,398 0 0	
Ditto debentures....	55,350 0 0
Interest.....	250 0 0
	190,998 0 0
Less debentures paid off.....	48,850 0 0
	142,938 0 0
	£1,429,694 4 4

Revenue Account, from December 31, 1845, to June 30, 1846.

DEBITOR.	
Maintenance of way and repairs of property.....	£4,489 1 2
Locomotive power:	
Working and repairing engines..	8,713 17 2
Stationary engines and inclines..	1,245 2 9
Coach and wagon repairs.....	3,015 11 5
Coaching account—including salaries to clerks, wages to porters, guards and police.....	3,056 6 11
Horse hire, fuel, gas and stores..	530 2 1
Shipping expenses.....	1,418 3 9
Way leaves, and damage ground rent.....	2,307 19 7
Rates and taxes.....	1,464 9 6
Government duty.....	1,453 3 4
Miscellaneous expenses.....	85 6 7
Direction.....	500 0 0
Auditors.....	20 0 0
Stationery, advertising and printing.....	265 5 0
Compensation.....	443 9 10
Debiture interest.....	7,504 15 3
Balance.....	47,759 3 1
	£84,273 17 5

CREDITOR.	
Balance of account to December, 1845, [less dividend, income & property tax, £42,153 18 9]....	£8,770 19 4
Amount received for conveyance of passengers, horses, carriages, parcels and mails.....	41,420 6 1
Goods.....	11,971 2 3
Coal.....	18,585 1 9
Cattle.....	1,311 15 9
Rents.....	1,393 8 6
Demurrage.....	891 3 9
	£84,273 17 5

Miscellaneous Items.

York and Cumberland Railroad.—The York and Cumberland railroad company met at Alfred, Me., on the 7th ult., and organized

by the choice of J. T. Paine, of Sandford, as president, and a board of directors, who were authorized to confer with the stockholders of the Boston and Maine railroad, as the road is a continuation of the latter.

Boston and Maine Railroad.—The annual meeting of the stockholders of the Boston and Maine railroad was held on Wednesday, 9th instant, at Haverhill. A very able and satisfactory report—showing somewhat in detail the financial state of the company—was read by the treasurer, and was accepted. The report showed the corporation to be in an exceedingly prosperous condition, with an acquisition of receipts for the last 3 months, of about \$30,000, over the corresponding months of last year.

The following persons were elected directors for the ensuing year: Thos. West, Andrew Pierce, R. W. Bayley, Wm. F. Weld, S. A. Walker, Henry B. Stone and John Flint. The two last named gentlemen were chosen in place of John Howe and Thaddeus Nichols, Esqrs., who declined a re-election.

The Railroads.—The Northern road, as the public are from time to time apprized in the Concord papers, is progressing rapidly, especially on the line hence to Franklin: and there is a fair prospect that the laborers upon it will shortly be transferred to the line of the Boston and Montreal road. Engineers are locating the latter road, and preparations are in progress for bridging the Merrimack just below Federal bridge. The stone locks of the Sewall's falls canal we hear are to be used in the substructure of the railroad bridge: a purpose not even dreamed of when that disastrous enterprize—the Sewall's falls—was in progress, about the year 1835-6.—*Concord N. H. Statesman.*

Ohio Railroads.—Burr Higgins, the enterprising superintendent of the Sandusky and Mansfield railroad, proposes to the citizens of Mt. Vernon to extend the road from Mansfield to that place, 25 miles. The Knox co. people to grade the road the coming winter, and in the spring to furnish the sill for laying down a double track, and the Sandusky people to furnish the iron and the requisite machinery for running on the road.—It is estimated that \$100,000 will if properly expended, finish the road ready for the iron and that Knox county bonds and the labor of the people along the line, are adequate means for completing the work. This done 43 miles in a level country will extend it to Columbus and 43 more will connect it with the Little Miami road at Springfield. The plan seems feasible. We do not know what Cleveland is doing; but if the Cuyahogas remain much longer quiet those shrewd Sanduskys will have got so far ahead as to draw the travel to Columbus and Cincinnati by way of Sandusky.—*Cincinnati Gazette.*

Middlesex Railroad.—We understand, says the Boston Traveller, than an association of gentlemen propose to apply, at the next session of the legislature of Massachusetts, for a charter to construct a railroad from old Concord along the bank of the Concord river to the Lowell railroad in Billerica.

The length of this line is but 10 miles, a perfect level; the water flowing back 16 miles from Concord to Sudbury; and as there are no cuts or embankments of any consequence, it is understood the whole cost of the line with a light T rail, exclusive of cars and engines, will not exceed \$120,000.

This route will serve to connect the three shire towns of Lowell, Concord and Cambridge. It will unite Lowell by the shortest and cheapest route with the Fitchburg railroad, and thus open an easy communication from Lowell, Manchester, Nashua, and Essex to Keene, Brattleboro', Greenfield, and Rutland, Vt. connecting at Concord with the Lancaster and Sterling railroad, and at Billerica with the Lowell and Andover railroad; it will also connect Lowell, Nashua, Manchester and Essex, and the Boston and Maine railroad with Lancaster, West Boylston, Worcester, and the Providence and Worcester railroad.

A single link of 10 miles already graded by nature will thus serve to tie together the great manufacturing districts of Massachusetts, Maine and New Hampshire, and to connect them with the farming districts of Vermont and western Massachusetts.

On the completion of this line, the travel which now divides itself upon many routes will be concentrated in this. Lines of stages now run from Lowell through Waltham to Newton Falls, from Lowell via Acton to Worcester, from Lowell via Littleton to Worcester, also from Lowell by Groton and Fitchburg to Worcester, and from Nashua to Worcester. Several of these carry large numbers of passengers and many going from the valley of the Merrimack now take coach for Keene and Vermont at Nashua.

The whole combined will well support a short and cheap railroad, and not trench on the interests of any other line. We understand that a party of engineers will soon be put on the route.

Peterboro' and Shirley Railroad.—The organization of this corporation was completed at Townsend, on Monday last, when the following gentlemen were chosen directors, viz:—Jacob Forster and Dan'l White, of Charlestown, David Loring, of Concord, Levi Warren and Sam'l Adams, of Townsend, Geo. F. Farley and Dan'l Needham, of Groton, Geo. Elliot, of Mason, Jonas M. Melville, of Jeffrey, John Preston, of New Ipswich, and H. L. Cogswell, of Peterboro'. A meeting of directors is to be held at Groton on Friday next, at 10 o'clock, when measures will probably be taken for the advancement of the work.—*Bunker Hill Aurora.*

Hudson River Railroad.—At Poughkeepsie on Wednesday last, \$47,500 had been subscribed to the stock of this road. The whole amount subscribed we have not learnt, but we think there can hardly be a doubt as to the whole amount being taken up immediately.

We are surprised that the city of New York, which is so deeply interested in the construction of this road, and will be benefited more than any other, should subscribe so

little towards the amount necessary to insure its success.—*Hudson, N. Y. Gazette.*

Baltimore and Ohio Railroad.—The great railroad convention which is to be held at Weston, in Lewis county, Va., on the 25th inst.—the object of which is to obtain the extension of the Baltimore and Ohio railroad through Virginia to a suitable point on the Ohio river—is regarded with uneasiness at Richmond, a portion of the press of which latter city is out against it. The Baltimore American says: "This movement is exclusively, a spontaneous one on the part of the people of western Virginia, who are now shut up from any available market, but who would secure by the railroad the important advantages of rapid and cheap outlets both to the Atlantic and the Ohio river. The opposition of Richmond is held to be a 'dog in the manger,' policy towards the west, and so far she has succeeded in maintaining it."

(Official) Reading Railroad.

A comparative statement of the business on the Philadelphia and Reading railroad for the week ending—

	Sept. 14, 1844.	Sept. 13, 1845.	Sept. 12, 1846.
Travel.....	\$2,241 24	\$2,319 84	\$2,937 58
Freight on goods.....	764 21	1,096 18	2,656 41
Do. do. coal.....	13,762 32	26,665 63	41,454 42
Miscell's receipts.....
Transp. U.S. mail.....
	\$16,767 77	\$30,081 65	\$47,048 41
Coal trans., tons.....	12,286	22,970	28,945

Coal Trade.

The amount received for tolls on all the New York canals during the second week in September is \$81,866
Same period in 1845..... 75,740

Increase 6,126

The aggregate amount received for tolls from the commencement of navigation to the 14th of September, inclusive, is..... \$1,589,678
During the same period in 1845..... 1,553,850

Increase 135,828

Mohawk and Hudson Railroad.—Account of earnings of the Mohawk and Hudson railroad from the 22d to the 31st of August:

Transportation of passengers, 1st class.....	\$3,998 17
" " " 2d ".....	124 93
" " freight.....	151 77

Total..... 4,274 87

Same time last year..... 3,737 78

Increase 537 09

For the week ending the 7th Sept., they were:

Passengers.....	\$3,085 24
Freight.....	144 53

Total..... 3,229 77

Same time last year..... 2,586 94

Increase 642 83

This is 25 per cent. gain, and exceeds the increase of any road in the country which has not been extended during the past year.—*Albany Argus.*

The *Express* states that the receipts of flour and wheat at tide water, from the opening of navigation to and including the first week of September, in 1845 and 1846, have been as follows:

	Flour, bbls.	Wheat, bush.
1846.....	1,590,294	915,283
1845.....	1,108,685	291,038

Increase 481,609 624,245

Equal to an excess of 606,456 barrels of flour, so far, during the present year, over the corresponding period last year.

English Iron Trade.

It will be seen by the following extracts from the London Mining Journal, of the 21st and 28th Aug., that prices are well sustained, with an upward tendency, and that heavy orders are expected from this country. The demand will probably be greater than the supply, at least for the present, consequently no reduction in price need be expected.

LONDON, AUGUST 21, 1846.

From a correspondent.

The market for bar and rail iron has been very firm during the week, and large orders taken for both at full prices, with every prospect of a further advance. Scotch pig iron has been rather dull within the last few days, owing to some small parcels being forced on the market, but the makers are firm and refuse to sell under 80s., less 2½ per cent. discount, free on board at Glasgow. Welsh and Staffordshire pigs are in good demand at quotations. Swedish iron and steel are dull of sale. English copper and tin are firm at quotations. In Straits or Banca very little done during the week. English pig lead is without alteration. For American as high as £17 15s. has been paid during the week. In Spanish nothing doing.

To the editor of the Mining Journal.

Glasgow Pig Iron Trade.—Sir: Our pig iron market is just now in rather a healthy state—the stock in the yard, having for some time been, and is still, diminishing, and the foreign demand promising. The principal markets are sold out, for at least the next two months; and for delivery after that period, are asking 80s. The principal holders are firm at 77s. 6d. to 80s., according to brand for No. 1. We quote the price at which there were transactions done at to-day—72s. for No. 3; 75s. for 3-5ths No. 1, and 2-5ths No. 3; and 77s. 6d. for No. 1—cash, free on board.

DOUGLAS & HILL.

Glasgow, Aug. 19.

LONDON, AUGUST 28, 1846.

	£.	s.	d.
Bar a Wales—ton.....	0	0	8 10 0
" London.....	0	0	9 10 0
Nail rods.....	0	0	10 5 0
Hoop (staf.).....	11	5	11 10 0
Sheet.....	0	0	13 0 0
Bars.....	0	0	11 0 0
Rails, average.....	9	10	9 15 0
Welsh cold blast foundry pig....	4	5	5 0 0
Scotch pig b Clyde.....	3	14	3 16 0
Russian, CCND.....	0	0	16 0 0
" PSI.....	0	0	16 0 0
" Gourieff.....	14	5	14 10 0
" Archangel.....	0	0	13 10 0
Swedish d, on the spot.....	11	0	11 10 0
" Steel, fagt.....	0	0	15 5 0
kegs e.....	0	0	13 5 0

a, discount 2½ per cent.; b, net cash; c, discount 2½ per cent.; d, ditto; e, in kegs ½ and ¾ inch.

From our correspondent.

Iron.—Demand for Welsh and Staffordshire continues fair, and the prices are steady; a good business has been done this week in Scotch pig at 73s. to 74s. for mixed Nos.; and at 75s. to 76s. for No. 1. In foreign iron nothing doing, but sales of Swedish steel both on the spot and for arrival, have been made at quotations.

Communicated by Messrs. Whitcomb & Barton.

English bar continues very firm at the late advance; large orders are in the market at former prices, which have been declined. In Staffordshire and Welsh pig iron the demand has greatly increased, and higher rates paid. The Scotch pig iron market has been rather dull during the week—holders, however, are not disposed to give way; orders being expected by the next American packet, which will in all probability, greatly affect prices—sales have been made to-day at 76s. 6d. and 77s. 6d., mixed Nos., bill at three and four months. Foreign iron and steel still dull of sale. In spelter sales are reported this week at £19 5s. and £19 7s. 6d.

Correspondents will oblige us by sending in their communications by Tuesday morning at latest.

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AMERICAN RAILROAD JOURNAL.

PUBLISHED BY D. K. MINOR, 23 Chambers street, N. Y.

Saturday, September 26, 1846.

Patent Safety Switch.

It appears by a recent decision of the commissioner of patents, that the invention of that excellent contrivance to prevent accidents on railroads—the safety switch—heretofore known as Nicoll's patent safety switch, has been assigned to Philos B. Tyler, chief coiner at the mint of New Orleans, on the ground of priority. The latter gentleman having placed one on the road commenced at New Orleans to run to Nashville, when engineer of that road in 183—.

This Mr. Tyler, it will be remembered, is the inventor of the recent great improvement in a machine to compress cotton by the direct action of steam.

See following advertisement

TYLER'S PATENT SAFETY SWITCH.

The following decision of the Commissioners of Patents is respectfully submitted to Railroad Engineers, Superintendents, and all others interested in the subject.

(COPY.)

UNITED STATES PATENT OFFICE, }
Washington City, D. C., April 28th, 1846. }

SIR: You are hereby informed that in the case of the interference between your claims and those of Gustavus A. Nicolls, for improvements in safety switches—upon which a hearing was appointed to take place on the 3rd Monday in March, 1846, the question of priority of invention has been decided in your favor. Inclosed is a copy of the decision.—The testimony in the case, is now open to the inspection of those concerned. Yours Respectfully,

EDMUND BURK,
Commissioner of Patents.

To Philos B. Tyler.

Any further information may be obtained by addressing John Pendleton, Agent for the Proprietor 149 Hudson Street, New York. 1m39

RAILROAD IRON.—THE NEW JERSEY
Iron Company, Boonton, N. J., are now preparing to make Railroad Bars, and are ready to take orders or make contracts for Rails, deliverable after the first of December next. Apply to

DUDLEY B. FULLER, Agent.

No. 139 Greenwich, corner of Cedar street.
September 18, 1846. 10:39

NOTICE TO CONTRACTORS.—BOSTON,
Concord and Montreal Railroad Company.—This company is now ready to contract for the grading and masonry of said road, or any portion thereof, south of Meredith Bridge, with the exception of two miles immediately north of Merrimack River. They are ready, likewise, to contract for sleepers, and lumber for fencing said road from Concord to Meredith Bridge. Any proposals for grading masonry, sleepers, or fencing, may be left with Theodore French, Esq., Treasurer of said company, at his office in Concord, and it will receive due attention.
PETER CLARK, Agent.
Concord, September 2, 1846. 3:39

Railroads in Virginia.

The Virginians we observe are agitating the project of a railroad from Richmond to Danville. We have in consequence been looking at the map of Virginia, and it strikes us that this projected railroad may advantageously have for a considerable distance the same common stem with the Richmond and Ohio railroad. Indeed it may prove that the best route for the latter improvement will be by the Staunton river gap. In this case, three-fourths of the length of a railroad between Richmond and Danville, will be necessarily effected in the construction of the eastern portion of the Richmond and Ohio railroad.

We should think, under these circumstances, that the friends of the Richmond and Danville railroad would do well to unite their forces with those of the Richmond and Ohio railroad, rather than to attempt a separate improvement, which it would be much more difficult to effect. There are few projected roads in this country more deserving of the confidence of capitalists than that from Richmond to the Ohio; and as soon as this work shall be undertaken, it will certainly be followed by the construction of a branch railroad to Danville, or some other point on the Roanoke, and indeed by many branches.

We present these suggestions for what they may be worth, to the consideration of our Richmond friends, believing it of great importance to the success of the railroad system in our country, that as far as possible *trunk lines with branches* should be adopted, instead of multiplying unnecessarily parallel lines. These considerations appear to us entitled to *even more* weight than usual in Virginia, where capital is less abundant than in the states north of it, and where it appears to be still more difficult to induce its investment in internal improvements. We hope, however, soon to hear that the people of the "Old Dominion" have commenced the work in good earnest, and that the rich resources of that ancient commonwealth are to be laid open to the light of day—which they can only be, or in no way so well as by a railroad from tide water to the mouth of Guyandotte or its immediate vicinity.

Railroads in Germany.

Letters from Hamburg state that the number of laborers on the railroad from that city to Berlin, which has been about eight thousand, is now increased to ten thousand, and the work is carried on day and night without any interruption. The road is to be entirely finished before the month of December. The most part of the workmen employed there came originally from Silesia, and have been laboring on works of this kind for more than ten years. They are paid at the rate of a thaler current, 90 cents per day, a salary very high for that country. In their own country they could not earn more than four or five grochen per day.

Iron Works.

We see it stated in an exchange paper that the proprietors of all the iron works in and near Baltimore, "have reduced the wages of their workmen *twenty-five per cent.*" The iron works alluded to give employment, we understand, to nearly two thousand persons. The cause of this reduction in the price of labor, is said to exist in the fact that "eastern manufacturers, who have hitherto been extensive buyers in that market of pig iron at \$30 to \$32 per ton, are now offering but \$25 for the same article."

The Baltimore Sun gives this statement, and remarks that "this proceeding on the part of the iron masters is premature, to say the least—and also

says that, "if prices current are good for anything at all, let us see what they have to say. The Baltimore American of Saturday last, enjoying an eminent commercial character, says:

"Iron.—Few transactions have taken place this week. We quote *sales* Locust Grove pig at \$30 per ton."

"Here is not only a quoted price of \$30, but sales at that rate.

"Lyford of Saturday last, says, and he is regarded as excellent authority:

"Pig, Elk Ridge, No. 1, \$33 a \$35; pig for puddling, \$30 a \$32; Locust Grove \$32 a \$35."

"American pig is quoted in New York, up to last Saturday, at an average decline since the passage of the tariff, of \$1 50 per ton. In Boston, American pig is quoted at \$27 50 a \$29 per ton. The New York Courier and Enquirer of Saturday last, quotes American pig, No. 1, \$35 a \$37; common, do., \$26 a \$30, which is a slight decline on the spring prices. Let us add to these facts the recent accounts from England, which represent that in view of the parliamentary sanction of a much greater amount of railway than was expected, iron is rallying from the late depression, and prices confidently expected to advance. Indeed, Willmer & Smith quote an advance, as follows; pig No. 1, Welch, £4 15 a £5; and the next later quotation, £5 2 a £5 5.

"We do not profess," says the Sun, "to make these quotations as direct evidence against the necessity for a 'reduction of wages,' as the phrase goes; but as indices of the market, they do seem to intimate at least that such 'reduction' is quite premature, and especially so, to such an extent as 25 per cent. Indeed, looking into the future, with the above facts to guide the judgment, it certainly appears that something like 20 per cent. of that 'reduction' must be clear profit to the iron masters. The American notes *sales* at the quoted price, and thus we are rather puzzled to account for this sudden 'reduction of wages.' If the market was glutted and the demand much inferior to the supply, as may be the case for ought we know, we could realize some propriety in such a proceeding, were it for the sole purpose of keeping the men employed; but the fact that sales are made at fair prices, or at but a slight decline, forbids the supposition that such is the case."

We have already expressed our opinion upon this point, and we repeat that we not only look upon this movement of the iron masters as "premature" and unnecessary; though we admit that it is a *natural result*, when people act under the influence of fear, and without a full knowledge of the present and prospective condition of the iron trade in Europe. We are *fully* convinced that in this important branch of business there will be *full and steady* employment for an increased number of furnaces and rolling mills, both in this country and in England, to supply the immediate and constant demand for iron; and that it is only necessary for the alarmists to be quieted, and the *alarmed* to have time to recover from the effect attendant upon *unnecessary and unwise* legislation, and all will come right again, in the common course of business events. The demand for iron *must* and *will* increase, and in spite of the fears of capitalists, who are easily affected, and the efforts of politicians, who would make capital out of them, that time and future events will prove that the position we have assumed is the correct one, which calm reasoning and a little foresight might have suggested to the most prejudiced.

Very Good.

The annexed anecdote is an amusing instance of the rapidity with which converts are now-a-days made—to the *reality* of what some deem *visionary* schemes. At the late celebration at the opening of the Miami road to Springfield, Ohio, a dinner party was given, an account of which has already appeared in our columns. A gentlemen present gave the following toast, says the Cincinnati Gazette:

"By D. J. A. Warder, of Cincinnati: *The first engineer of the Little Miami railroad*—whose untiring energy enabled him to make the first survey of the Miami railroad, amid the sneers of his fellow citizens.

"Prof. Mitchell, being the person alluded to, mounted the table, and made a very eloquent and amusing speech. He said that after he had equipped himself to commence the survey of the Little Miami railroad, he called at the postoffice to see if there were any letters for him. There he met with Mr. H——, who enquired, 'what he was up to now?' 'Why,' said the professor, 'I am going to survey the route for the Little Miami railroad.' 'Well,' said Mr. ———, bursting into a monstrous horse laugh, 'you are the greatest fool I ever did see.' Mr. ———, being present at the table, rose, and with great sang froid said—'I'll take that back, professor—I'll take it all back.'"

Coal.

The last number of the Anthracite Gazette, contains the following items in reference to the coal trade.

The shipments this week amount to 27,419-13 tons being a decrease of almost 1,000 tons, and showing a continued decrease shipment from this region, from the highest quantity sent of quite 10,000 tons per week. The total amount shipped to date is 844,246-14.

The amount of red ash is tolerably active, but the white ash trade is completely stagnant.

Magnetic Telegraph.

We find in the Albany Evening Journal, the following statement of the extent of telegraph now in use. There are at present, it will be seen, upwards of 1,200 miles of telegraph lines in operation in this country, as follows:

	Miles.
From New York to New Haven, Hartford, Springfield and Boston.....	265
From New York to Albany, Utica, Auburn, Syracuse, Rochester, Lockport and Buffalo....	507
From New York to Philadelphia, Baltimore and Washington.....	210
From Philadelphia to Harrisburg.....	100
From Boston to Lowell.....	26
From Boston to Portland, (110 miles, half finished).....	55
From Ithaca to Auburn.....	40
From Troy to Saratoga.....	31
Now in operation.....	1,234

Worcester Railroad Depot.

We copy from the Boston Journal, the following description of the Worcester railroad depot.

As our readers are well aware, the land belonging to the Worcester railroad company, located on the South Cove, is quite extensive. The company have erected on their property very large buildings, which are used as store-houses, passenger depots, machine shops, etc. A few days since, through the politeness of a gentleman connected with the Worcester railroad, we were conducted through the various buildings. First and foremost we would mention the new depot, on Albany street, which the Worcester railroad company built for the use of the Old Colony railroad. This building 120 feet in length was erected in the most thorough and substantial manner. It now extends on Albany, from Kneeland, about two-thirds of the way, to Beach street. In the course of a short time the building will be extended to

Beach street, more extensive accommodations being required by the Worcester railroad company. As we stated above, this depot is now used by the Old Colony railroad, but it is the intention of this company to put up a depot for their own use, the present one not being sufficiently large to accommodate them. The way travel on this road is much larger than it was anticipated, at the time of its construction, it would be, and very long trains are required to convey the passengers. It is only a week since we saw the afternoon train leave the depot, the train before it started filling the depot, and the cars extending quite across Kneeland street, and blocking up the passage.

The Old Colony depot will be on Beach and Lehigh streets. The track will not pass over the Worcester railroad, but will turn shortly after crossing the bridge from South Boston, and pass up Lehigh street. Both companies will be much better accommodated by this arrangement.

The Worcester company are now finishing a very large and fine hall, over the Old Colony depot, which it is intended shall be used for a dancing hall. The dimensions we should judge are about 80 or 90 feet in length by 60 in width. It is well lighted and thoroughly ventilated. The gallery for the orchestra is much larger than usual. The finish of the hall is plain but neat—the floor laid in hard pine, is one of the best we ever saw. On each side of the entrance, which is very broad and of easy ascent, are ante-rooms, (two on a side) to be used as dressing rooms, which will be fitted with all modern conveniences—the passage to the music gallery is from the main entrance, and is also provided with a small ante-room. Over the hall in the attic, is a large room, which will serve an excellent purpose as a supper room.—This will be decidedly the best dancing hall in the city.

The old machine shop and engine house are now in the course of alteration to store houses—a new machine shop and engine house having been erected during the past season. Several wooden buildings near the old shop, are now coming down to afford room for railroad tracks, and the wood sheds are to be removed farther south. In the engine house, we saw nine locomotives, at the time of our visit, three more were in the machine shop for repairs—the engine house has standing tracks for thirteen locomotives.

One of the engines under repair was the "Lion," an English locomotive, and one of the first which ran over the road. It was originally a very fine engine, one of the best but is now too small, possessing too little power for the general work of the road, though it answers every purpose for the trains running short distances. It is of very different construction from the engines now manufactured, and is of much lighter work. The wheels in particular, are much lighter, though they are made of wrought iron. It ran the first regular express from Worcester to this city, and did the distance in one hour and seventeen minutes. It has been done in less time since, we believe. Most of the locomotives used on the Worcester railroad, are man-

ufactured by Messrs. Hinckly & Drury, of this city, and they have the reputation of being very excellent engines. Among them are some very large and powerful machines. The engine which drives the machinery in the machine shop was manufactured by Messrs. H. and D., and works very beautifully. Upon one of the engines, workmen are fitting a new spark-catcher, which we hope for the comfort of all railroad travellers will prove entirely successful. A successful spark-catcher is the great desideratum. We are informed that it has been in use on the Reading (Pa.) railroad for six months, and that it operates very successfully. The smoke pipe is square, or nearly so, and not round, as is ordinarily the case with locomotives.—The principle of the invention consists in forcing the sparks, smoke and gases, as they issue from the furnace, back into the fire-pan to be burned over again. In the lower part of the pipe, is a common fan to keep up a draft, driven by the exhaust steam, the steam being conducted for this purpose, into a drum or cylinder connected with the smoke pipe.

A portion of this steam is conducted back to the tender to aid in heating the water.—By this operation fuel will be saved, as the water will be partially heated, before it is drawn into the boiler. From the bottom of the smoke pipe, a strong pipe is passed along under the boiler, to the fire-pan. When steam is up and the engine in motion, the fan creates a draft, and forces the sparks, smoke and a portion of the gases, through this pipe to the furnace, where they are again consumed, the operation, of course, going on so long as the engine is in motion. To prevent as far as possible the escape of sparks and smoke, the following arrangement is devised: A cylinder of the height of the smoke pipe is placed within it; the space between the cylinder and the pipe at the top is made perfectly tight. This cylinder (which has a diameter of some 12 or 15 inches, perhaps more) has an outer and inner circumference, of iron work, with interstices some third of an inch long—the space between the two circumferences, about an inch, is filled with coarse gravel, just large enough not to pass through the interstices—the passage for the escape of smoke, etc., is from the inside of the cylinder, which of course is open at the top. All the sparks, smoke, etc., pass into the smoke pipe, and to escape from it must pass through the stratum of gravel, between the two circumferences, and so issue from the cylinder. With the fan in motion to create a draft and drive back whatever issues from the furnace, and with the escape cylinder so well guarded, it would seem almost impossible that any quantity of sparks or smoke should escape, though some of the gases may find their way out. To our limited knowledge of mechanics, the spark catcher looks as if it would work.

The railroad company construct their own cars, and have large workshops for the purpose. They have also a large number of smitheries, and a fire proof building for their paints and oils. In the manufacture of their cars they are certain of what enters into their

construction, as they purchase all the materials used by them. (It will be recollected by our readers that we gave a brief description a few days since of some new cars recently placed upon the Worcester railroad.) It is unnecessary for us to say that everything connected with the establishment is in admirable order.

Muscogee Railroad.

From the proceedings below it will be seen that the corporators of the Muscogee railroad are moving forward in this important undertaking.—*Columbus, (Ga.) Enquirer.*

At a meeting of the corporators of the Muscogee railroad, held in said city on this day, present John G. Winter, chairman, John Banks, A. H. Elewellen, John H. Howard, Jas. R. Jones, Wm. A. Redd, Hines Holt, and P. T. Schley, being a majority of the corporators, Col. Banks, from the committee heretofore appointed for that purpose, reported the following resolutions—which, upon the motion of Col. Holt, were unanimously adopted:

Resolved, That the following rules and regulations be adopted for the purpose of carrying out the charter of "the Muscogee railroad company," and of providing the subscriptions to the stock thereof—

1st. The capital stock of "the Muscogee railroad company" shall be seven hundred thousand dollars, until the same is increased by the corporators or the board of directors, hereafter to be elected; to be divided into seven thousand shares, of the value of one hundred dollars each.

2d. That books for subscriptions to the stock of said company shall be opened on Saturday, the 26th day of September next, at the city of Columbus, for two thousand shares amounting to two hundred thousand dollars, under the superintendence of Abner H. Elewellen, John H. Howard, J. I. Moses, Wm. A. Redd and Wiley Williams, or any three of them.

At Talbotton, in Talbot county, for one thousand shares, amounting to one hundred thousand dollars, under the superintendence of Dr. H. P. Smead, Robert Dixon, Barnard Hill, G. W. Towns and Allen Owen, or any three of them.

At Thomaston, in Upsom county, for one thousand shares, amounting to one hundred thousand dollars, under the superintendence of D. B. Grant, Gen. E. Turner, Thomas Goode, O. C. Gibson, and Thos. Elewellen, or any three of them.

At the city of Macon for one thousand shares, amounting to one hundred thousand dollars, under the superintendence of Jerry Cowles, James Nisbet, J. J. Gresham, Thaddeus G. Holt and John Ross, or any three of them.

At the city of Savannah for two thousand shares, amounting to two hundred thousand dollars, under the superintendence of R. R. Cuyler, Everard Hamilton, John W. Anderson, Asa Holt and Edward Padelford, or any three of them.

3d. It shall be the duty of said commissioners to keep said books open for receiving subscriptions to the stock of said company for

the space of ten days, at each of said places, unless the shares should sooner be subscribed for; and they shall require from each subscriber for stock the payment of 2½ per cent. upon the amount of his subscription, at the time of subscribing therefor; upon which payment said commissioners receiving the subscription as aforesaid, shall give to each subscriber a certificate, showing the number of shares for which he has subscribed, and the amount which he has paid thereon.

4th. Immediately after the closing of said books of subscription, it shall be the duty of said commissioners at Talbotton, Thomaston, Macon and Savannah, to make a return thereof, properly certified by them, to the commissioners for opening books in the city of Columbus, together with all sums of money received by them for subscriptions to the stock of said company; which commissioners at Columbus, aforesaid, shall immediately thereafter deposit all monies received by them in bank, to the credit of said company, and make a report to the company of all the stock subscribed for, the stockholders names, and the amount paid by each.

5th. When said report shall have been made by said commissioners, the corporators named in the charter, or a majority of them, will appoint a time and place for the meeting of the subscribers for stock, in the city of Columbus, of which they will give due notice in the public gazettes of said city; at which time and place the stockholders will proceed to the election of seven directors, to complete the organization of said company, according to the terms of the charter.

6th. Upon the failure of the company to organize by the first day of March next, it shall be the duty of the said commissioners at Columbus to return to each subscriber for stock, the amount of money which he may have paid in to any of the aforesaid commissioners at the time of his subscribing for stock in said company.

By order of the board of corporators,
JOHN G. WINTER, Chairman.
WILEY WILLIAMS, Secretary.

The Muscogee Railroad.—We cannot allow, says the Savannah Republican, the proceedings of the corporators of the Muscogee railroad company to go before the public without saying a few words in regard to the importance of the proposed improvement as connected with others in the states of Georgia, Alabama and Mississippi. Our readers have already heard of the great projected line of improvement which is intended to extend west from Montgomery, Alabama, through Jackson and Brandon, Mississippi, to Vicksburg. We have before us a report to the citizens of Vicksburg, which informs us that the road from that place to Jackson, a distance of 46 miles is already complete, and that a charter has been granted by the legislatures of Mississippi and Alabama to certain persons known as the Southern railroad company, for the purpose of constructing the road from Jackson to Montgomery, a distance say of 240 miles. In order to aid in the enterprise, the legislature of Mississippi yielded to the company, as a gift, the two per cent. fund, amount-

ing to \$300,000 most of it now subject to draft on the United States Treasury. The state of Alabama made a similar grant of a similar fund, which is at present loaned, however, to the Montgomery and West Point company. If the road between Barnesville and Columbus is completed, the connection with Montgomery will follow as a matter of course—indeed we are informed that the people of Alabama are resolved to urge its construction and pledge themselves to furnish the necessary means. That being done, we will have the following line of improvements, extending from Savannah west, viz:

	Miles.
From Savannah to Macon	190
" Macon to Barnesville	40
" Barnesville to Columbus	70
" Columbus to Montgomery	90

Total from Savannah to Montgomery 390

Add to this the projected road from Montgomery to Jackson, 240 miles, and the completed road between Jackson and Vicksburg 46 miles, and we will have a continuous line of communication, running west, of 676 miles passing through the very heart of the best cotton region in the world!

Railroads.

The various railroad enterprises of the country are in progress without any cessation of public interest in them, which is clearly on the increase in every part of the country. There is now in operation in the U. States over eleven thousand miles of railroad. The route from Portland to Montreal is urged on with great vigor by its friends, and operations have been commenced at both extremities of the line. It will most probably be carried on to completion in spite of its great cost, and the lack of capital which it would command were it a Boston or New York enterprise. If the various railroad routes are executed, which are now proposed, and most of them will be, the seaboard of New England will have a much more direct available connection with the interior than has hitherto been the case. Salem, (Mass.) is soon to be connected with the new city of Andover by a railroad, and thence to Manchester, in this state, a road will be built in the course of a few years. Portsmouth, also, cannot fail at no very distant time to have a direct road to this place. This will enlarge the market for domestic produce to the great advantage of our farmers. In other parts of the country great progress is now making in furnishing the inhabitants with railroad facilities. The great New York and Erie railroad, from New York city to lake Erie, is again put in course of construction, being now in operation over 60 miles. It is also contemplated to build a railroad from New York city to Albany, a distance of 150 miles, which it is intended to run over in five hours—the fastest steamboat not being able to go in less than eight. In winter, of course, it will command the whole traffic. The only railroad communication in winter now is by means of the Housatonic railroad—a very roundabout and inconvenient route. It is stated that the Western railroad is likely to be benefitted by the new free trade system of

the English, as much of the produce which was formerly shipped by way of Montreal will now come over the Western road to Boston. This stock is now nearly up to par, and the prospect is that in a short time it will pay a dividend of more than six per cent. A railroad is now constructed some distance above Springfield, Mass., on the Connecticut, and is said to do an immense business. This road will no doubt be extended up the valley of the Connecticut as far as Wells river—at which point the proposed Passumpsic road will touch the river.

Of the southern states, Georgia seems to have taken the lead in railroad matters, there being in that state over 500 miles of railroad in successful operation. In Ohio considerable has been done within the last year, but the western states in general are doing but little, having so injured their credit by their repudiating proceedings that they can do nothing for them as state enterprises, and individual capital is too scanty to make any great advance. Several of the southern and western roads have been so unprofitable and have been so badly managed that they are entirely abandoned.

As we have before remarked, the interest in railroads in this country has by no means reached its maximum—it has arrived to nothing like the pitch it has reached in England. To that point, or somewhere near it, it certainly will arrive, when not only all, or nearly all, the railroad enterprises now projected will be built, but many others, some of them sufficiently absurd, not now dreamed of, will be projected. The railroad interest in England still continues as intense as ever, and occasions great alarm to the financiers of that country, by the vast absorption of the active capital of the country into railroad enterprises which is now going on.—*N. H. Gazette.*

The following resolutions, in relation to the English subscriptions to the stock of the St. Lawrence and Atlantic railroad, are taken from the Montreal Times.

At a special general meeting of the stockholders of the St. Lawrence and Atlantic railroad company, held on Saturday at the company's office, St. James street, to consider the demands made upon the provisional committee in London, by a portion of the English scripholders, for the return of their deposits, and to decide thereon—the Hon. Mr. Moffatt was called to the chair, and Mr. Steers named as secretary.

On motion, Resolved 1, That the proprietors of the capital stock of the St. Lawrence and Atlantic railroad company, having duly considered the disinclination manifested by a portion of the scripholders in Great Britain to continue their connection with the enterprise, in which they are mutually engaged, and their application to the provisional committee in London for the re-payment of their deposits, feel called upon to express their regret, that a great and important colonial work, such as the St. Lawrence and Atlantic railroad, has not been met in the mother country, even by those who had willingly become associated with themselves for its prosecution,

with that encouragement which the large excess in the number of shares applied for then over the whole capital, had given them just reason to expect.

Resolved 2, That the proprietors, desirous of removing all cause of dissatisfaction on the part of the dissentient scripholders in Gt. Britain, and the more forcibly to evince the spirit in which their enterprise has been undertaken and conducted, are disposed to adopt the suggestions of the board of directors, relative to the demand made by such dissentients, and in accordance therewith to authorize, and they do hereby empower the said directors, to take the necessary measures to offer to such of the scripholders in Great Britain (not having signed the subscription of shares books) as may be desirous of receiving the same, the re-payment of their deposits, deducting them from their proportionate share of the expenditure in England and in Canada to this date, with the exception of the cost of survey, now in prosecution, and that arising from land negotiations.

To which Benjamin Hart, Esq., proposed the following amendment:

That, although the large additional support which this railroad has met with in Canada, and the confidence with which it is now regarded by the public at large, leaves no room for doubt that the undertaking could be prosecuted and completed without the assistance of the English shareholders, still, the proprietors would not feel themselves justified on sound principles in acceding to the request of the scripholders in England.

Which was put to the meeting, and negatived; after which the original resolution was adopted unanimously.

Resolved 3, That the board of directors be and they are hereby authorized to take measures to defend any action or actions that have been or may hereafter be brought for the recovery of their deposits, by scripholders who may refuse to accept the compromise, as now proposed by this meeting.

T. STEERS, Secretary.

Railroad to Rome.—The *Macon Messenger* says: "We learn that the contemplated branch from the state road at the Kingston depot near Cassville, to Rome, at the head of navigation on the Coosa river, has been examined within the week past by the president of the Macon and Western road and others disposed to embark in the undertaking, and that they have determined to enter on the work as early as practicable. The Macon and Western, and Georgia railroads, will be largely interested in it, and a company has been formed and organized. The work will be entered on immediately, and completed within twelve months. The road will be but about eighteen miles in length to terminate at our miniature specimen of the 'Eternal city,' which we trust will be much larger hereafter. Here the Coosa is navigable for upwards of 150 miles nearly to Wetumpka, Alabama. The country on the river is rich and productive in cotton, and other produce. The transportation of this, with the goods necessary to supply that portion of Tennessee, will no doubt afford an ample re-

muneration for the expense of constructing the road."

New England Railroads.—The Boston Courier of Tuesday, in its money article, has the following statement respecting the high estimation in which railroad investments are held in that quarter. In these times of doubt and distrust they have become the leading securities. The Courier says:

"A fair demand exists for the solid dividend securities; the railroads taking the lead, as they are considered safer, and less liable to loss, trouble in negotiation, and other contingencies, than any other recorded property. Similar stocks in England take the same rank. They constitute reservoirs for the rich, saving banks for the less fortunate in pecuniary affairs, and can be relied upon for liberal and improving returns at stated periods."

The Courier adds that the following, being the latest quotations, show the enormous advance which has been reached by some of the popular railway stocks in Great Britain:

Great North of England.....	£234 for	£100 paid.
Birmingham and Gloucester..	129 for	100 paid.
Edinburgh and Glasgow.....	75 for	50 paid.
Great Western.....	152 for	85 paid.
Hull and Selby.....	107 for	50 paid.
Manchester and Birmingham.	88 for	40 paid.
Midland Counties.....	146 for	140 paid.
Manchester and Leeds.....	122 for	82 paid.
London and Birmingham....	230 for	100 paid.

Some of these railways were partly built with borrowed capital, at a low rate of interest: consequently all the net surplus is for the benefit of the shareholders. These roads have been very successful, the dividends have been large, and as a natural consequence the prices have advanced, in some instances, to one hundred and thirty per cent.—*Baltimore American.*

Hiwassee Railroad.

The Savannah Republican says, "The probable early completion of the Western and Atlantic railroad, to Cross Plains, seems likely to lead to most important results. We yesterday understood that an arrangement has been effected, by which the branch road from Kingston to Rome will be pressed forward to completion immediately, Capt. Tyler of the Macon and Western company, having agreed to unite with the Georgia railroad company, in furnishing the iron and other necessary equipments. This will open to the whole Coosa valley, and to north Alabama, an outlet to the Atlantic. The Coosa is navigable for 90 miles below Rome for steamboats. On the other hand, the people of east Tennessee are alive to their true interest.—We find in the Knoxville *Register* of the 26th ult., the following:

"**Public Meeting.**—We are requested by a number of our citizens to state that there will be a public meeting at the court house, on Saturday next, at 11 o'clock, a.m., to take into consideration the expediency of adopting measures for re-commencing at as early a day as practicable, the construction of the *Hiwassee railroad*.

It will be recollected that the Hiwassee road leads from Cross Plains to Knoxville, a distance of 90 miles, and that the track for the entire distance has been graded and will

require but little except the superstructure, iron, and equipments. The Knoxville Register, in publishing the above notice, adds: "We have heretofore taken frequent occasion to urge upon the public the great importance of this work, and have published column after column in relation to it, in the hope that the community would be aroused to a sense of the necessity of the completion of the improvement."

"It is a subject of vast moment to east Tennessee, and we hope our citizens will take a sufficient degree of interest in it to induce them to attend the proposed meeting. Let there be a general attendance of the people—as well those who are, as those who are not, stockholders in the road."

Michigan Central Railroad.—We learn this morning that the whole amount of the stock, (\$20,000) of the Michigan Central railroad has been subscribed. The sale of the road, therefore, in pursuance of an act of the Michigan legislature, will now be perfected. The transfer of the interest of the state, to the corporators, will take place on the 28th inst., on or before which time 25 per cent. of the purchase money must be paid at Detroit. *Albany Journal.*

Michigan Central Railroad.—The Journal of Commerce states that this railroad has at length passed into the hands of Boston capitalists. The state bonds were purchased by the company at 70 per cent. on the original value. Some large subscriptions to the new stock had been made in New York.

The Boston Times learns from Hancock's express, that the new section of railroad from Braintree to Randolph was opened on Wednesday morning. The entire line to Fall river, it is said, will be completed on or before the 1st day of November next.

VALUABLE PROPERTY ON THE MILL DAM FOR SALE. A lot of land on Gravelly Point, so called, on the Mill Dam, in Roxbury, fronting on and east of Parker street, containing 68,497 square feet, with the following buildings thereon standing:

Main brick building, 120 feet long, by 46 ft wide, two stories high. A machine shop, 47x43 feet, with large engine, face, screw, and other lathes, suitable to do any kind of work.

Pattern shop, 35x32 ft. with lathes, work benches, Work shop, 86x35 feet, on the same floor with the pattern shop.

Forge shop, 118 feet long by 44 feet wide on the ground floor, with two large water wheels, each 16 feet long, 9 ft diameter, with all the gearing, shafts, drums, pulleys, &c., large and small trip hammers, furnaces, forges, rolling mill, with large balance wheel and a large blowing apparatus for the foundry.

Foundry, at end of main brick building, 60x45 ft. two stories high, with a shed part 45x30 feet, containing a large air furnace, cupola, crane and corn oven.

Store house—a range of buildings for storage, etc., 200 feet long by 20 wide.

Locomotive shop, adjoining main building, fronting on Parker street, 54x25 feet.

Also—A lot of land on the canal, west side of Parker st., containing 6000 feet, with the following buildings thereon standing:

Boiler house 50 feet long by 30 feet wide, two stories.

Blacksmith shop, 49 feet long by 20 feet wide.

For terms, apply to HENRY ANDREWS, 48 State st., or to CURTIS, LEAVENS & CO., 106 State st., Boston, or to A. & G. RALSTON & Co., Philadelphia.

TO LOCOMOTIVE AND MARINE ENGINE BOILER BUILDERS. Pascal Iron Works, Philadelphia. Welded Wrought Iron Flues, suitable for Locomotives, Marine and other Steam Engine Boilers, from 2 to 5 inches in diameter. Also, Pipes for Gas, Steam and other purposes; extra strong Tube for Hydraulic Presses; Hollow Pistons for Pumps of Steam Engines, etc. Manufactured and for sale by

MORRIS TASKER & MORRIS, War-house S. E. corner 3d and Walnut Sts., Philadelphia 11f

MACHINE WORKS OF ROGERS, Ketchum & Grosvenor, Patterson, N. J. The undersigned receive orders for the following articles, manufactured by them of the most superior description in every particular. Their works being extensive and the number of hands employed being large, they are enabled to execute both large and small orders with promptness and despatch.

Railroad Work. Locomotive steam engines and tenders; Driving and other locomotive wheels, axles, springs & flange tires; car wheels of cast iron, from a variety of patterns, and chills; car wheels of cast iron with wrought tires; axles of best American refined iron; springs; boxes and bolts for cars.

Cotton, Wool and Flax Machinery of all descriptions and of the most improved patterns, style and workmanship.

Mill gearing and Millwright work generally; hydraulic and other presses; press screws; callenders; lathes and tools of all kinds; iron and brass castings of all descriptions.

ROGERS, KETCHUM & GROSVENOR, a45 Paterson, N. J., or 60 Wall street, N. York.

Valuable Works on Engineering for Sale.

The following works, belonging to the late Wm. R. Casey, have been deposited at this office for sale. It will be seen that they comprise most of the standard books. The reports and non-enumerated pamphlets are however among the best part of the collection, as many of them are not to be found or purchased at any price. So desirable an opportunity seldom offers for securing an excellent set of professional works.

LIST OF ENGINEERING BOOKS BELONGING TO W. R. CASEY, deceased.

- 1.—The Civil Engineer and Architect's Journal, quarto, vols. 1, 2, 4, 5 and 6, and nos. 79 to 81, and 84 to 95—remaining numbers expected from Montreal, Canada.
- 2.—Railroad Journal, quarto, vols. 1, 2, 3; octavo, vols. 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 and 17; octavo vols. 18, and loose nos. to date; being nearly a complete set.
- 3.—Reports and Documents, 6 or 7 octavo vols.
- 4.—Tredgold's Carpentry, quarto, with plates.
- 5.—Barlow on Strength and Stress of Timber, octavo, with plates.
- 6.—Turnbull on Iron, octavo.
- 7.—Nicholson's Masonry and Stone Cutting, octavo, with plates.
- 8.—Tredgold's Tracts on Hydraulics, octavo, with plates.
- 9.—Gregory's Mathematics for Practical Men, octavo, with plates.
- 10.—Wood on Railroads, octavo.
- 11.—Pambour on Locomotives, octavo, with plates, (Philadelphia edition.)
- 12.—Leacock on Railroads, octavo, with plates.
- 13.—Smeaton's Tracts, 1796, octavo, with plates.
- 14.—Seward's New London Bridge, octavo, with plates.
- 15.—Storror's Treatise on Water Works, duodecimo.
- 16.—Report on Atmospheric Railway, etc., quarto, with plates.
- 17.—Gallier's Price Book and Estimator, octavo.
- 18.—Public Works of Great Britain, folio, \$25.
- 19.—Weale's Bridges, new and valuable, \$23.

The above books will be sold by the single volume, if desired, and forwarded by express, or otherwise, as directed by the purchaser.

Please address E. Hedge, Railroad Journal Office, 23 Chambers street, New York. 36tf

RAILROAD IRON.—THE SUBSCRIBER'S New Rail Iron Mill at Phoenixville, Pa., is expected to be ready to go into operation by the 1st of September, and will be capable of turning out 30 to 40 tons of finished Rails per day. They are now prepared to receive orders to that extent, deliverable after the 1st of October next, for heavy rails of any pattern now in use, equal in quality and finish to best imported.

PIG IRON.—They are also receiving weekly 150 to 200 tons of No. 1 Phoenix Foundry Iron, well adapted for light castings.

REEVES, BUCK & CO,
45 North Water St., Philadelphia,
or by their Agent, ROBT. NICHOLS,
79 Water St., New York; 28tf

RAILROAD SCALES.—THE ATTENTION of Railroad Companies is particularly requested to Ellicott's Scales, made for weighing loaded cars in trains, or singly, they have been the inventors, and the first to make platform scales in the United States; supposing that an experience of 20 years has given a knowledge and superior advantage in the business.

The levers of our scales are made of wrought iron, all the bearers and fulcrums are made of the best cast steel, laid on blocks of granite, extending across the pit, the upper part of the scale only being made of wood. E. Ellicott has made the largest Railroad Scale in the world, its extreme length was one hundred and twenty feet, capable of weighing ten loaded cars at a single draft. It was put on the Mine Hill and Schuylkill Haven Railroad.

We are prepared to make scales of any size to weigh from five pounds to two hundred tons.

ELLCOTT & ABBOTT,
Factory, 9th street, near Coates, cor. Melon st.
Office, No. 3 North 5th street,
Philadelphia, Pa. 1y25

THE NEWCASTLE MANUFACTURING Company continue to furnish at the Works, situated in the town of Newcastle, Del. Locomotive and other steam engines, Jack screws, Wrought iron work and Brass and Iron castings, of all kinds connected with Steamboats, Railroads, etc.; Mill Gearing of every description; Cast wheels (chilled) of any pattern and size, with Axles fitted, also with wrought tires, Springs, Boxes and bolts for Cars; Driving and other wheels for Locomotives.

The works being on an extensive scale, all orders will be executed with promptness and despatch. Communications addressed to Mr. William H. Dobbs, Superintendent, will meet with immediate attention.

ANDREW C. GRAY,
a45 President of the Newcastle Manuf. Co.

NEW YORK AND ERIE RAILROAD Company Notice. The Stockholders of the New York and Erie Railroad Company are hereby notified, that the annual election for Directors of the company will be held at the office, No. 45 Wall st., in the city of New York, on Tuesday, the 15th day of October next, from 10 o'clock, A.M., to 3 o'clock, P.M.

The Transfer Books will be closed from the 22d of September until the day after the election.

By order of the Board of Directors,
NATHANIEL MARSH, Secretary.
New York, September 12, 1846. 4138

A. & G. RALSTON & CO., NO. 4
A. South Front St., Philadelphia, Pa.

Have now on hand, for sale, Railroad Iron, viz: 180 tons 2½ x ½ inch Flat Punched Rails, 20 ft. long.

25 " 2½ x ½ " Flange Iron Rails.

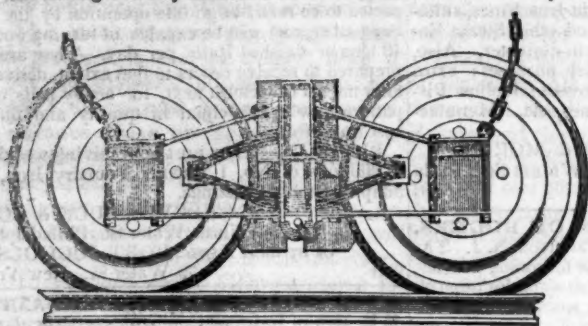
75 " 1 x ½ " Flat Punched Bars for Drafts in Mines. A full assortment of Railroad Spikes, Boat and Ship Spikes. They are prepared to execute orders for every description of Railroad Iron and Fixtures. 11f

SPRING STEEL FOR LOCOMOTIVES, Tenders and Cars. The Subscriber is engaged in manufacturing Spring Steel from 1½ to 6 inches in width, and of any thickness required: large quantities are yearly furnished for railroad purposes, and wherever used, its quality has been approved of. The establishment being large, can execute orders with great promptitude, at reasonable prices, and the quality warranted. Address

JOAN F. WINSLOW, Agent,
Albany Iron and Nail Works, 1y

RAY'S EQUALIZING RAILWAY TRUCK.—THE SUBSCRIBER

ber having recently formed a business connection in the City of New



York, expressly for the manufacture of the newly patented and highly approved Railroad Truck of Mr. Fowler M. Ray, is ready to receive orders for building the same, from Railroad Companies and Car Builders in the United States, and elsewhere.

The above Truck has now been in use from one to two years on several roads a sufficient length of time to test its durability, and other good qualities, and to satisfy those who have used it, as may be seen by reference to the certificates which follow this notice.

There have been several improvements lately introduced upon the Truck, such as additional springs in the bolster of passenger cars, making them delightful riding cars—adapting it to tenders, trucks forward of the locomotive, and freight cars, which, with its original good qualities, make it in all respects the most desirable truck now offered to the public.

Orders for the above, will, for the present, be executed at the New York Screw Mill, corner 33d street and 3d avenue, (late P. Cooper's rolling mills) and at the Steam Engine Shop of T. F. Secor & Co., foot of 9th street, East

river, (of which firm the subscriber was late a partner) under the immediate supervision of Mr. Ray himself.

Several sets of trucks containing the latest improvements have recently been turned out for the New York and Erie railroad, and the New Jersey Transportation company, which may be seen upon said roads.

The patronage of Railroad Companies and Car Builders is respectfully solicited.

New York, May 4, 1846.

W. H. CALKINS, and Others.

To all whom it may concern:—This is to certify that the New Haven, Hartford and Springfield railroad co., have had in use six sets of F. M. Ray's patent trucks for the last 20 months, during which time it appears to me, they have proved to be the best and most economical truck now in use.

[Signed,]

WILLIAM ROE, Supt of Power.

I certify that F. M. Ray's Patent Equalizing Railroad Truck has been in use on the Philadelphia and Reading railroad for some time past, under a passenger car.

For simplicity of construction, economy in cost, lightness of material, and extreme ease of motion, I consider it the best truck we have ever used. Its peculiar make also renders it less liable to be thrown off the track, when passing over any obstruction. We intend using it extensively under the passenger and freight cars of the above road.

Reading, Pa., October 6, 1845.

[Signed,] G. A. NICOLL,

Supt Transportation, etc., Philadelphia and Reading Railroad.

To all whom it may concern:—This is to certify that the N. Jersey Railroad and Transportation company have used Fowler M. Ray's Truck for the last seven months, during which time it has operated to our entire satisfaction. I have no hesitation in saying that it is the simplest and most economical truck now in use.

[Signed,] T. L. SMITH,

N. Jersey Railroad and Transp. Co.

This is to certify that F. M. Ray's Patent Equalizing Railroad Truck has been in use on the Long Island railroad for the last year, under a freight car.

For simplicity of construction, economy in cost, lightness of material and ease of motion, I consider it equal to any truck we have in use.

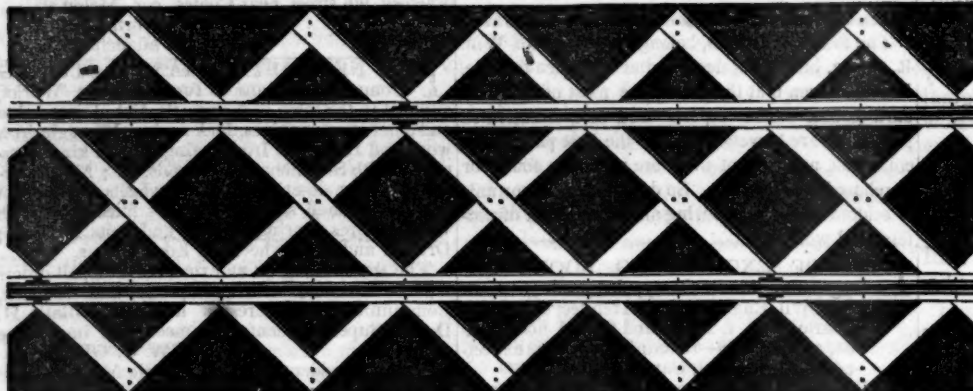
Long Island Railroad Depot,

[Signed,] JOHN LEACH,

Jamaica November 12, 1845.

1y19 Supt Motive Power.

HERRON'S PATENT AMERICAN RAILWAY TRACK,



As seen stripped of the top ballasting

HERRON'S IMPROVEMENTS IN RAILWAY SUPERSTRUCTURE effect a large aggregate saving in the working expenses, and maintenance of railways, compared with the best tracks in use. This saving is effected—1st, Directly by the amount of the increased load that will be hauled by a locomotive, owing to the superior evenness of surface, of line and of joint. This gain alone may amount to 20 per cent. on the usual load of an engine.—2d, In consequence of the thorough combination, bracing, and large bearing surface of this track, it will be maintained in a better condition than any other track in use, at about one-third the expense.—3d, As action and reaction are equal, a corresponding saving of about two-thirds will be effected in the wear and tear of the engines and cars, by the even surface and elastic structure of the track.—4th, The great security to life, and less liability to accident or damage, should the engine or cars be thrown off the rails.—5th, The absence of jar and vibration, that shake down retaining walls, embankments and bridges.—6th, The great advantage of the high speed that may be safely attained, with ease of motion, reduction of noise, and consequently increased comfort to the traveller.—7th, The really permanent and perfect character of the Way, insuring regularity of transit. To which may be added the great increase of travel, that would be induced by the foregoing qualities to augment the revenue of the railroad.

The cost of the Patent track will depend on the quantity and cost of iron and other materials; but it will not exceed, even including the preservation of the timber, the average cost of the tracks on our principal railroads. Generally, the timber structure, fastenings and workmanship, exclusive of the cost of the iron rails, will be from \$2,300 to \$4,000 per mile. On this structure, rails of from 40 to 50 lbs. per yard, will be equal in effect to

60 and 70 lbs. rails laid in the usual way. The proprietors of a road, furnishing approved materials in the first instance, the undersigned will construct the track on his plan, in the most perfect manner, with recent improvements, for one thousand dollars per mile. And he will farther contract to maintain said track for the period of ten years, furnishing such preserved timber and iron fastenings as may be required, and keeping said track in perfect adjustment, under any trade not exceeding 100,000 tons per annum, or its equivalent in passenger transportation, for two hundred dollars per mile per annum.* To insure the faithful performance of this contract, he will pledge one-fourth of the cost of construction, with the accruing interest thereon, regularly vested, until the completion of the contract. So that a company, by securing payment to the undersigned at the specified period, will have only \$750 per mile to pay for the workmanship on the track, without any charge being made for the use of the patent, the subsequent payments, for maintenance of way, and amount withheld, being made from the large margin of profits that will result from its use.

JAMES HERRON.

Civil Engineer and Patentee.

No. 277 South Tenth St., Philadelphia.

* A general average of the repairs done on six of the most successful railroads in this country, for a period of from six to eight years' use has been found to exceed \$625 per mile per annum, exclusive of renewal of rails. But few roads in this country carry as much as 100,000 tons per annum. When a road exceeds that quantity, the repairs due to the additional tonnage, up to 200,000 tons, will be charged at one mill per ton; over the latter, and not exceeding 300,000 tons, nine-tenths of a mill, etc. Where there are two tracks to maintain, a large reduction upon those rates will be made.

THE AMERICAN RAILROAD JOURNAL is the only periodical having a general circulation throughout the Union, in which all matters connected with public works can be brought to the notice of all persons in any way interested in these undertakings. Hence it offers peculiar advantages for advertising times of departure, rates of fare and freight, improvements in machinery, materials, as iron, timber, stone, cement, etc. It is also the best medium for advertising contracts, and placing the merits of new undertakings fairly before the public.

RATES OF ADVERTISING.

One page per annum.....	\$125 00
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THOMAS PROSSER, 28 Platt St. N.Y. (See Adv.)
J. F. WINSLOW, Albany Iron and Nail Works, Troy, N. Y. (See Adv.)
TROY IRON AND NAIL FACTORY, H. Burden, Agent. (See Adv.)
ROGERS, KETCHUM and GROSVENOR, Patterson, N. J. (See Adv.)
S. VAIL, Speedwell Iron Works, near Morristown, N. J. (See Adv.)
NORRIS, BROTHERS, Philadelphia Pa. (See Adv.)
KITE'S Patent Safety Beam. (See Adv.)
FRENCH & BAIRD, Philadelphia, Pa. (See Adv.)
NEWCASTLE MANUFACTURING COMPANY, Newcastle, Del. (See Adv.)
ROSS WINANS, Baltimore, Md.
CYRUS ALGER & Co., South Boston Iron Company.
SETH ADAMS, Engineer, South Boston
STILLMAN, ALLEN & Co., N. Y.
JAS. P. ALLAIRE, N. Y.
PHENIX FOUNDRY, N. Y.
ANDREW MENEELY, West Troy.
JOHN F. STARR, Philadelphia, Pa.
MERRICK & TOWNE, do.
HINCKLEY & DRURY, Boston.
C. C. ALGER, Stockbridge Iron Works, Stockbridge, Mass.

PATENT HAMMERED RAILROAD, SHIP and Boat Spikes. The Albany Iron and Nail Works have always on hand, of their own manufacture, a large assortment of Railroad, Ship and Boat Spikes, from 2 to 12 inches in length, and of any form of head. From the excellence of the material always used in their manufacture, and their very general use for railroads and other purposes in this country, the manufacturers have no hesitation in warranting them fully equal to the best spikes in market, both as to quality and appearance. All orders addressed to the subscriber at the works, will be promptly executed. **JOHN F. WINSLOW, Agent.**

Albany Iron and Nail Works, Troy, N. Y.
The above spikes may be had at factory prices, of Erastus Corning & Co., Albany; Hart & Merritt, New York; J. H. Whitney, do.; E. J. Etting, Philadelphia; Wm. E. Coffin & Co. Boston. ja45

PATENT RAILROAD, SHIP AND BOAT Spikes. The Troy Iron and Nail Factory keeps constantly for sale a very extensive assortment of Wrought Spikes and Nails, from 3 to 10 inches, manufactured by the subscriber's Patent Machinery, which after five years' successful operation, and now almost universal use in the United States (as well as England, where the subscriber obtained a patent) are found superior to any ever offered in market.

Railroad companies may be supplied with Spikes having countersink heads suitable to holes in iron rails, to any amount and on short notice. Almost all the railroads now in progress in the United States are fastened with Spikes made at the above named factory—for which purpose they are found invaluable, as their adhesion is more than double any common spikes made by the hammer.

All orders directed to the Agent, Troy, N. York, will be punctually attended to.

HENRY BURDEN, Agent.
Spikes are kept for sale, at Factory Prices, by I. & J. Townsend, Albany, and the principal Iron merchants in Albany and Troy; J. I. Brower, 222 Water St., New York; A. M. Jones, Philadelphia; T. Janviers, Baltimore; Degrand & Smith, Boston.

*** Railroad Companies would do well to forward their orders as early as practicable, as the subscriber is desirous of extending the manufacturing so as to keep pace with the daily increasing demand. ja45

FRENCH AND BAIRD'S PATENT SPARK ARRESTER.

TO THOSE INTERESTED IN Railroads, Railroad Directors and Managers are respectfully invited to examine an improved SPARK ARRESTER, recently patented by the undersigned.

Our improved Spark Arresters have been extensively used during the last year on both passenger and freight engines, and have been brought to such a state of perfection that no annoyance from sparks or dust from the chimney of engines on which they are used is experienced.

These Arresters are constructed on an entirely different principle from any heretofore offered to the public. The form is such that a rotary motion is imparted to the heated air, smoke and sparks passing through the chimney, and by the centrifugal force thus acquired by the sparks and dust they are separated from the smoke and steam, and thrown into an outer chamber of the chimney through openings near its top, from whence they fall by their own gravity to the bottom of this chamber; the smoke and steam passing off at the top of the chimney, through a capacious and unobstructed passage, thus arresting the sparks without impairing the power of the engine by diminishing the draught or activity of the fire in the furnace.

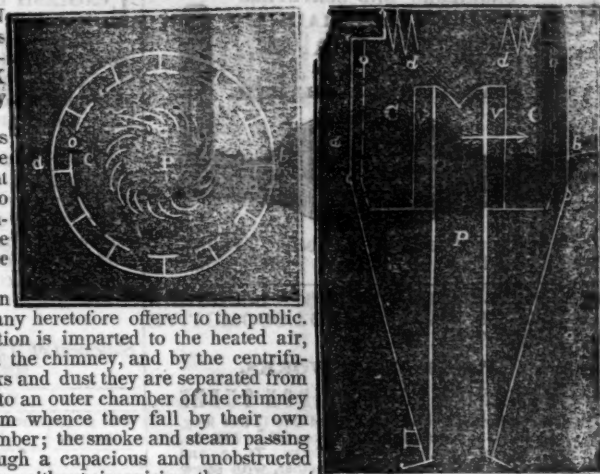
These chimneys and arresters are simple, durable and neat in appearance. They are now in use on the following roads, to the managers and other officers of which we are at liberty to refer those who may desire to purchase or obtain further information in regard to their merits:

R. L. Stevens, President Camden and Amboy Railroad Company; Richard Peters, Superintendent Georgia Railroad, Augusta, Ga.; G. A. Nicolls, Superintendent Philadelphia, Reading and Pottsville Railroad, Reading, Pa.; W. E. Morris, President Philadelphia, Germantown and Norristown Railroad Company, Philadelphia; E. B. Dudley, President W. and R. Railroad Company, Wilmington, N. C.; Col. James Gadsden, President S. C. and C. Railroad Company, Charleston, S. C.; W. C. Walker, Agent Vicksburgh and Jackson Railroad, Vicksburgh, Miss.; R. S. Van Rensselaer, Engineer and Sup't Hartford and New Haven Railroad; W. R. M'Kee, Sup't Lexington and Ohio Railroad, Lexington, Ky.; T. L. Smith, Sup't New Jersey Railroad Trans. Co.; J. Elliott, Sup't Motive Power Philadelphia and Wilmington Railroad, Wilmington, Del.; J. O. Sterns, Sup't Elizabethtown and Somerville Railroad; R. R. Cuyler, President Central Railroad Company, Savannah, Ga.; J. D. Gray, Sup't Macon Railroad, Macon, Ga.; J. H. Cleveland, Sup't Southern Railroad, Monroe, Mich.; M. F. Chittenden, Sup't M. P. Central Railroad, Detroit, Mich.; G. B. Fisk, President Long Island Railroad, Brooklyn.

Orders for these Chimneys and Arresters, addressed to the subscribers, care Messrs. Baldwin & Whitney, of this city or to Hinckly & Drury, Boston, will be promptly executed. **FRENCH & BAIRD.**

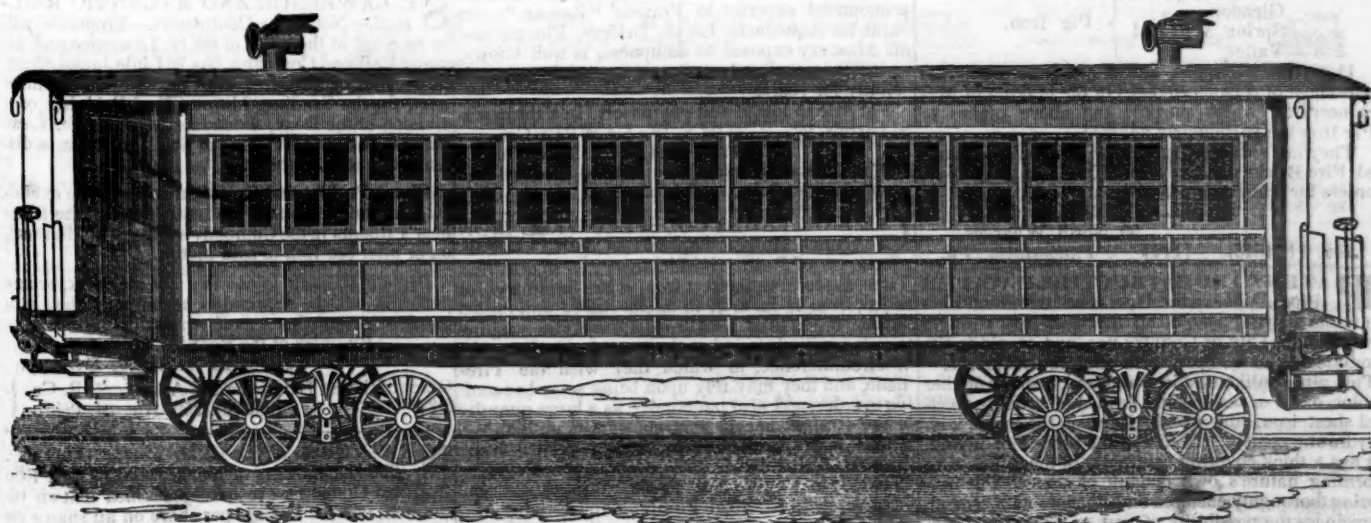
N. B.—The subscribers will dispose of single rights, or rights for one or more States, on reasonable terms. Philadelphia, Pa., April 6, 1844.

*** The letters in the figures refer to the article given in the Journal of June, 1844. ja45



BENTLEY'S PATENT TUBULAR STEAM BOILER. The above named Boiler is similar in principle to the Locomotive boilers in use on our Railroads. This particular method was invented by Charles W. Bentley, of Baltimore, Md., who has obtained a patent for the same from the Patent Office of the United States, under date of September 1st, 1843—and they are now already in successful operation in several of our larger Hotels and Public Institutions, Colleges, Alms Houses, Hospitals and Prisons, for cooking, washing, etc.; for Bath houses, Hatters, Silk, Cotton and Woollen Dyers, Morocco dressers, Soap boilers, Tallow chandlers, Pork butchers, Glue makers, Sugar refiners, Farmers, Distillers, Cotton and Woollen mills, Warming Buildings, and for Propelling Power, etc., etc.; and thus far have given the most entire satisfaction, may be had of D. K. MINOR, 23 Chambers st. New York.

DAVENPORT & BRIDGES' CAR WORKS.



DAVENPORT & BRIDGES CONTINUE TO MANUFACTURE TO ORDER, AT THEIR WORKS, IN CAMBRIDGEPORT, MASS. Passenger and Freight Cars of every description, and of the most improved pattern. They also furnish Snow Ploughs and Chilled Wheels of any pattern and size. Forged Axles, Springs, Boxes and Bolts for Cars at the lowest prices. All orders punctually executed and forwarded to any part of the country. Our Works are within fifteen minutes ride from State street, Boston—coaches pass every fifteen minutes. 1y1

ENGINEERS' AND SURVEYERS'
INSTRUMENTS MADE BY
EDMUND DRAPER,
Surviving partner of
STANCLIFFE & DRAPER.



No 23 Pear street, below Walnut,
1y10 near Third, Philadelphia.

TO RAILROAD COMPANIES AND BUILDERS OF MARINE AND LOCOMOTIVE ENGINES AND BOILERS.

PASCAL IRON WORKS.

WELDED WROUGHT IRON TUBES

From 4 inches to 1 in calibre and 2 to 12 feet long, capable of sustaining pressure from 400 to 3300 lbs. per square inch, with Stop Cocks, T, L, and other fixtures to suit, fitting together, with screw joints, suitable for STEAM, WATER, GAS, and for LOCOMOTIVE and other STEAM BOILER PLANS.



Manufactured and for sale by
MORRIS, TASKER & MORRIS.
Warehouse S. E. Corner of Third & Walnut Streets,
PHILADELPHIA.

LAP-WELDED WROUGHT IRON TUBES

FOR

TUBULAR BOILERS,
FROM 1 1/4 TO 6 INCHES DIAMETER,
and

ANY LENGTH, NOT EXCEEDING 17 FEET.

These Tubes are of the same quality and manufacture as those so extensively used in England, Scotland, France and Germany, for Locomotive, Marine and other Steam Engine Boilers.

THOMAS PROSSER,

Patentee.

1y25

28 Platt street, New York.

THE SUBSCRIBERS, AGENTS, FOR

the sale of
Codorus,
Glendon,
Spring Mill and
Valley, } Pig Iron.

Have now a supply, and respectfully solicit the patronage of persons engaged in the making of Machinery, for which purpose the above makes of Pig Iron are particularly adapted.

They are also sole Agents for Watson's celebrated Fire Bricks and prepared Kaolin or Fire Clay, orders for which are promptly supplied.

SAM'L KIMBER, & CO.,

59 North Wharves,

Jan. 14, 1846. [1y4] Philadelphia, Pa.

PATENT INDESTRUCTIBLE WATER
Pipes. The subscribers continue to manufacture the above PIPES, of all the sizes and strength required for City or Country use, and would invite individuals or companies to examine its merits.—This pipe, unlike cast iron and lead, imparts neither color, oxide or taste, being formed of strongly riveted sheet iron, and evenly lined on the inside with hydraulic cement. While in the process of laying, it has a thick covering externally of the same—thus forming nature's own conduit of stone. The iron being thoroughly enclosed on both sides with cement, precludes the possibility of rust or decay, and renders the pipe truly indestructible. The prices are less than those of iron or lead. We also manufacture Basins and D. Traps, for Water Closets, on a new principle, which we wish the public to examine at 112 Fulton street, New York.

291f

J. BALL & CO.

ENGLISH PATENT WIRE ROPES—FOR THE USE OF MINES, RAILWAYS, ETC.—

for sale or imported to order by the subscriber.

These Ropes are manufactured on an entirely different principle from any other, and are now almost exclusively used in the collieries and on the railways in Great Britain, where they are considered to be greatly superior to hempen ones, or iron chains, as regards safety, durability and economy. The plan upon which they are made effectually secures them from corrosion in the interior, as well as the exterior of the rope, and gives a greater compactness and elasticity than is found in any other manufacture.

Many of these ropes have been in constant operation in the different mines in England, and on the Blackwall and other inclined planes, for three and four years, and are still in good condition.

They have been applied to almost every purpose for which hempen ropes have been used—mines, heavy cranes, standing rigging, window cords, lightning conductors, signal halyards, tiller ropes, etc. Reference is made to the annexed statement for the relative strength and size. Testimonials from the most eminent engineers in England can be shown as to their efficiency, and any additional information required respecting the different descriptions and application will be given by

ALFRED L. KEMP,

75 Broad street, New York, sole agent in the United States.

Statement of Trial made at the Woolwich Royal Dock Yard, of the Patent Wire Ropes, as compared with Hempen Ropes and Iron Chains of the same strength.—October, 1841.

WIRE ROPES.			HEMPEN ROPES.			CHAINS.		STRENGTH.
Wire gauge number.	Circumference of rope.	Weight per fathom.	Circumference of rope.	Weight per fathom.	Weight per fathom.	Diameter of iron.	Tons.	
	INCH.	LBS. OZ.	INCH.	LBS. OZ.	LBS.	INCH.		
11	4 1/4	13 5	10	24 -	50	15-16	20	
13	3 1/4	8 3	8 1/4	16 -	27	11-16	13 1/2	
14	3 1/4	6 11	7 1/4	12 8	17	9-16	10 1/2	
15	2 1/2	5 2	6 1/4	9 4	13 1/2	1-2	7	
16	2 1/2	4 3	6	8 8	10 1/2	7-16	7 1/2	

N.B. The working load, with a perpendicular lift, may be taken at 6 cwt. for every lb. weight per fathom, so that a rope weighing 5 lbs. per fathom would safely lift 3360 lbs., and so on in proportion. 1y24

NICOLL'S PATENT SAFETY SWITCH

for Railroad Turnouts. This invention, for some time in successful operation on one of the principal railroads in the country, effectually prevents engines and their trains from running off the track at a switch, left wrong by accident or design.

It acts independently of the main track rails, being laid down, or removed, without cutting or displacing them.

It is never touched by passing trains, except when in use, preventing their running off the track. It is simple in its construction and operation, requiring only two Castings and two Rails; the latter, even if much worn or used, not objectionable.

Working Models of the Safety Switch may be seen at Messrs. Davenport and Bridges, Cambridgeport, Mass., and at the office of the Railroad Journal, New York.

Plans, Specifications, and all information obtained on application to the Subscriber, Inventor, and Patentee
G. A. NICOLLS,
Reading, Pa.

ja45

LAWRENCE'S ROSENDALE HYDRAULIC CEMENT.

This cement is warranted equal to any manufactured in this country, and has been pronounced superior to Francis' "Roman." Its value for Aqueducts, Locks, Bridges, Floods, and all Masonry exposed to dampness, is well known, as it sets immediately under water, and increases in solidity for years.

For sale in lots to suit purchasers, in tight paper-barrels, by **JOHN W. LAWRENCE,**
142 Front street, New York.

Orders for the above will be received and promptly attended to at this office. 32 1y

GEORGE VAIL & CO. SPEEDWELL IRON

Works, Morristown, Morris Co., N. J.—Manufacturers of Railroad Machinery; Wrought Iron Tires, made from the best iron, either hammered or rolled, from 1 1/4 in. to 2 1/4 in. thick.—bored and turned outside if required. Railroad Companies wishing to order, will please give the exact inside diameter, or circumference, to which they wish the Tires made, and they may rely upon being served according to order, and also punctually, as a large quantity of the straight bar is kept constantly on hand.—Crank Axles, made from the best refined iron; Straight Axles, for Outside Connection Engines; Wro't. Iron Engine and Truck Frames; Railroad Jack Screws; Railroad Pumping and Sawing Machines, to be driven by the Locomotive; Stationary Steam Engines; Wro't. Iron work for Steamboats, and Shafting of any size; Grist Mill, Saw Mill and Paper Mill Machinery; Mill Gearing and Mill Wright work of all kinds; Steam Saw Mills of simple and economical construction, and very effective Iron and Brass Castings of all descriptions. 1y1

OFFICE NEW YORK AND ERIE RAILROAD CO.,
45 Wall Street, New York, Aug. 28, 1846. }

NOTICE IS HEREBY GIVEN, THAT PROPOSALS will be received until the 13th day of October next, for the Grading, Masonry and Bridging required to complete that portion of the New York and Erie Railroad between a point three miles east of Port Jervis in Orange county, and the village of Binghamton in Broome county, a distance of about 133 miles.

Maps and profiles, estimates and specifications, will be found after the 10th of September in the office of the company, at New York city, where every necessary information will be given. The engineers on the line of the road will also furnish all requisite facilities to contractors desirous of examining the route.

The line will be divided into sections of convenient length for construction, and proposals in writing will be received at the New York office for the whole or any part of the work. By order of the President and Directors.

6:36

T. S. BROWN, Chief Engineer.

ST. LAWRENCE AND ATLANTIC RAILROAD.—Notice to Contractors.—Proposals will be received at the office of the St. Lawrence and Atlantic Railroad Company, No. 18 Little James Street, in the City of Montreal, until the 24th of September next, for the Grading, Masonry and Bridging, of a division of the Road, extending from the St. Lawrence River to the Village of St. Hyacinthe, a distance of about 30 miles.

Plans, Profiles and Specifications will be exhibited, and the requisite information given at the Engineer's Rooms in the Company's Offices, at Montreal, on or after the 15th of said month.

Persons offering to contract for the work, or any part of it, will be required to accompany their proposals with satisfactory references.

By order of the Board,

THOMAS STEERS, Secretary.

Office of the St. Lawrence and Atlantic R. R. Co.,
3:36 Montreal, 25th August, 1846. }

NEW YORK AND ERIE RAILROAD CO.

The stockholders of the New York and Erie Railroad Company are hereby notified that an installment of Five Dollars per share on all shares on which the payments already made do not exceed 20 dollars, is required to be paid, (agreeable to the terms of subscription) at the office of the company, No. 45 Wall street, on or before the 1st day of October next. By order of the Board of Directors.

NATHANIEL MARSH, Sec'y.

New York, August 31st, 1846.

4:36